DOCUMENT RESUME

ED 406 559	CE 073 816

AUTHOR	Feilner, Veronica; Robling, Jeannine
TITLE	Health Care Assistant Core. Instructor Manual.
INSTITUTION	Missouri Univ., Columbia. Instructional Materials Lab.
SPONS AGENCY	Missouri State Dept. of Elementary and Secondary Education, Jefferson City. Div. of Vocational and Adult Education.
PUB DATE	Sep 96
NOTE	844p.
AVAILABLE FROM	Instructional Materials Laboratory, University of Missouri, 8 London Hall, 2316 Industrial Drive, Columbia, MO 65202; phone: 800-669-2465; http://www.iml.coe.missouri.edu (order no. 50-1013-I).
PUB TYPE	Guides - Classroom - Teacher (052)
EDRS PRICE	EDRS Price MF5 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Allied Health Occupations Education; *Allied Health Personnel; Caregivers; *Competence; Competency Based Education; *Core Curriculum; Course Content; Curriculum; Educational Resources; Entry Workers; Health Occupations; High Schools; Job Skills; Learning Activities; Lesson Plans; *Medical Assistants; Minimum Competencies; National Curriculum; Standards; Student Evaluation; Test Items; Vocational Education
IDENTIFIERS	National Standards

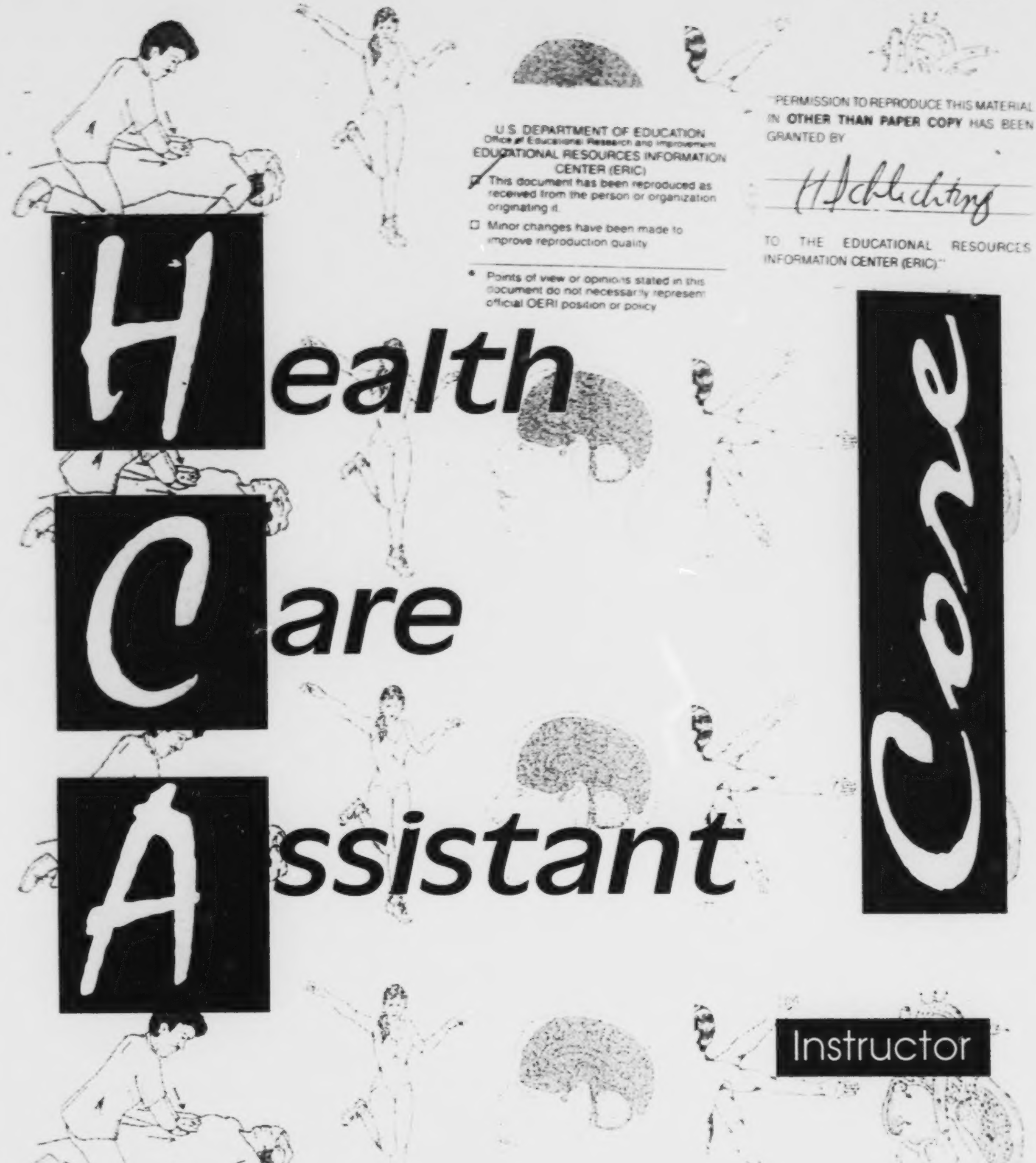
ABSTRACT

This document contains the core curriculum for a basic high school course for health care assistants. It is designed as a 1-semester course of study, after which students can take a course in an emphasis area, such as veterinary, nursing, pharmacology, or physical therapy, in which they learn skills for specific entry-level jobs. The curriculum guide begins with the following background information: a health occupations curriculum flowchart; a bibliography listing 51 references; a cross-reference of lessons from the nurse assistant in a long-term care facility curriculum with the health care assistant core; National Health Care Core Skill Standards; and a cross-reference of the National Health Care Core Skill Standards and the health care assistant core. The guide is divided into six units that cover the following topics: (1) the health care delivery system; (2) communication and observation skills; (3) safety; (4) concepts of microbiology; (5) anatomy and physiology; and (6) life stages. Within each unit, lesson plans break the content into manageable classroom lessons. Lesson plans contain some or all of the following: scope of the unit, lesson objectives, supplementary teaching and learning items, an informational assignment, references, an introduction, a lesson outline, summary, and conclusion, procedures for demonstrations (as needed), interaction items, classroom and laboratory activities, evaluation items with answers, and handouts. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 406 559

50-1013-I



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN **OTHER THAN PAPER COPY** HAS BEEN GRANTED BY

H Schlichting

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Health Care Assistant

Core

Instructor

Instructional Materials Laboratory
University of Missouri - Columbia
Department of Elementary and Secondary Education

CE 073 816

BEST COPY AVAILABLE

Notice: The information presented in this publication reflects current medical standards of care to the best of our knowledge. Of course, readers are advised to be aware of local protocols, the needs and circumstances of individual cases, and their responsibility to stay abreast of emerging knowledge and clinical procedures. The authors, editors, and publishers disclaim any responsibility for improper treatment resulting from the clinical procedures outlined in this publication, for misinterpretation of the information presented, and for any undetected inaccuracies within the text.

Available from:
Instructional Materials Laboratory
University of Missouri-Columbia
2316 Industrial Drive
Columbia, MO 65202
800-669-2465 or 573-882-2883

"Development of this product was supported in whole or part by funds from the Department of Elementary and Secondary Education, Division of Vocational and Adult Education. However, information or opinions expressed herein do not necessarily reflect the position or policies of the Missouri Department of Elementary and Secondary Education or the Division of Vocational and Adult Education, and no official endorsement should be inferred."

Health Care Assistant Core

Instructor Manual

Veronica Feilner, Senior Editor and Project Coordinator
Jeannine Robling, Assistant Editor
Instructional Materials Laboratory
University of Missouri-Columbia

Produced by the
Instructional Materials Laboratory
University of Missouri-Columbia
Columbia, Missouri

September 1996

Catalog Number 50-1013-I

Table of Contents

Acknowledgments ix

Foreword xi

Health Occupations Curriculum Flow Chart xv

Bibliography xvii

Cross-Reference of *Nurse Assistant in a Long-Term Care Facility* and *Health Care Assistant Core* xxi

National Health Care Core Skill Standards xxxi

Cross-Reference of the *National Health Care Core Skill Standards* and *Health Care Assistant Core* xxxv

Unit I: The Health Care Delivery System

Lesson 1: Health Care Assistant 1.1
  Handout 1: Essential Attitudes for Establishing Working Relationships with Clients 1.13
  Handout 2: Promoting Positive Human Relations 1.14
  Handout 3: Poem of Compassion 1.15
  Handout 4: Grooming 1.17
Lesson 2: Health Care Team 1.19
  Handout 1: The Health Care Team - Acute Care Facility 1.35
  Handout 2: The Health Care Team - Long-Term Care Facility 1.36
  Handout 3: Omnibus Budget Reconciliation Act (OBRA) 1.37
Lesson 3: Ethical and Legal Responsibilities 1.39
  Handout 1: Resident's Rights - State of Missouri 1.59
  Handout 2: Resident's Rights - Federal 1.63
  Handout 3: Patient's Rights - Proposed by Bureau of Hospital Licensing and Certification 1.73
  Handout 4: Patient's Rights - Department of Mental Health Statutes 1.75
  Handout 5: Patient's Rights - Department of Health - Home Health Licensing . 1.77
  Handout 6: Patient Self-Determination Act 1.79
  Handout 7: Abuse and Neglect Reporting 1.81
  Handout 8: Ethical and Legal Responsibilities - Activity Sheet 1.85

Unit II: Communication and Observation Skills

Lesson 1: Communication Skills 2.1
  Handout 1: Showing Effective Communication and Using Verbal Skills 2.19
  Handout 2: How to Be a Good Listener 2.21
  Handout 3: Check Your Listening Skills 2.22
  Handout 4: Rate Your Communication Skills 2.23

Handout 5: Types of Hearing Aids 2.25
Handout 6: Operation of a Hearing Aid 2.26
Handout 7: Communicating with the Aphasic Client 2.27
Lesson 2: Care Plan 2.29
Handout 1: Organizing Your Work 2.39
Handout 2: Overall Plan of Care - Sample 2.41
Handout 3: Nurse Assistant Notes/Observations 2.43
Lesson 3: Observation and Reporting 2.45
Handout 1: Observations to Report to the Instructor/Staff Personnel 2.61
Handout 2: Intervention Through Observation 2.63
Lesson 4: Charting on Medical Records 2.65
Handout 1: Glossary of Word Elements 2.79
Handout 2: Keys to Good Charting 2.87
Handout 3: Check Charting Form 2.89
Handout 4: Narrative Charting 2.91
Lesson 5: Basic Telephone Techniques 2.93
Handout 1: Telephone Techniques for the Health Professional 2.105
Handout 2: Using Proper Telephone Techniques 2.107
Handout 3: Using Proper Communication in an Emergency 2.111
Lesson 6: Systems of Measurement 2.113
Handout 1: Metric Table of Units 2.129
Handout 2: Converting Metric Measurements to U.S. Customary/Household . 2.130
Handout 3: U.S. Customary and the Metric System - Activity Sheet 2.131
Handout 4: Calculating Measurement Conversions - Activity Sheet 2.132
Handout 5: English - Metric Conversions - Activity Sheet 2.133
Handout 6: Applied Metric Measurements - Activity Sheet 2.134

Unit III: Safety

Lesson 1: Safety Measures for the Client and the Environment 3.1
Handout 1: Alternatives to Restraints 3.23
Handout 2: Safety Guidelines: Infant Through Adolescents 3.26
Handout 3: Restraints 3.27
Lesson 2: Fire, Natural Disasters, and Other Emergencies 3.29
Procedure: Clear Airway Obstruction in a Conscious Adult or Child Client . . . 3.55
Procedure: Clear Airway Obstruction in a Conscious Infant 3.57
Procedure: Clear Airway Obstruction in an Unconscious adult or Child Client . 3.59
Procedure: Clear Airway Obstruction in an Unconscious Infant 3.61
Handout 1: Moving Client to Safety 3.63
Handout 2: Safely Handling a Falling Client 3.64
Handout 3: First Aid for the Choking Victim (Adult) 3.65
Lesson 3: Body Mechanics 3.67
Procedure: Position Client in Seven Body Positions 3.83
Handout 1: Key Points in Body Mechanics 3.85
Handout 2: Body Positions 3.87
Handout 3: Bed Positioning for the Hemiplegic Client 3.89

Unit IV: Concepts of Microbiology

Lesson 1: Microorganisms 4.1
  Handout 1: Infectious Communicable Diseases 4.11
  Handout 2: Types of Bacteria 4.13
Lesson 2: Transmission of Microorganisms 4.15
  Handout 1: Geri Germ 4.27
  Handout 2: Ways Organisms Are Spread 4.31
Lesson 3: Infection Control 4.33
  Procedure: Wash Hands 4.55
  Procedure: Don and Remove Daily Care Nonsterile Gloves 4.57
  Procedure: Don and Remove Mask 4.59
  Procedure: Don and Remove Gown 4.61
  Handout 1: Sterile Technique Procedures 4.63
  Handout 2: Stop Sign Alert 4.65
  Handout 3: Infection Control 4.67
  Handout 4: Biohazard Label 4.69
Lesson 4: Acquired Immunodeficiency Syndrome and the Health Care Worker 4.71
  Handout 1: How the HIV Infection Attacks the Immune System 4.85
  Handout 2: AIDS Cases by Age 4.86
Lesson 5: Hepatitis 4.87
  Handout 1: Hepatitis A Fact Sheet 4.101
  Handout 2: Hepatitis B Fact Sheet 4.103
  Handout 3: Hepatitis C Fact Sheet 4.105

Unit V: Anatomy and Physiology

Lesson 1: The Body as a Whole 5.1
  Handout 1: Anatomical Position 5.13
  Handout 2: Body Planes 5.14
  Handout 3: Directional Terms 5.15
  Handout 4: Body Cavities 5.17
  Handout 5: Regions of the Abdomen 5.18
  Handout 6: Quadrants of the Abdomen 5.19
Lesson 2: Organization of the Body 5.21
  Handout 1: The Cell 5.35
Lesson 3: Skin System 5.37
  Handout 1: Skin Section 5.47
Lesson 4: Digestive System 5.49
  Handout 1: Digestive System 5.69
  Handout 2: True Digestive Organs 5.70
  Handout 3: Junction of Stomach and Intestine 5.71
  Handout 4: Accessory Digestive Organs 5.72
  Handout 5: Molar 5.73
  Handout 6: Incisor 5.74
  Handout 7: Primary/Permanent Teeth 5.75
Lesson 5: Nutrition 5.77
  Handout 1: General Nutrition 5.93
  Handout 2: Food Pyramid 5.95
  Handout 3: Suggested Weights for Adults 5.98

7

Lesson 6: Skeletal System 5.99
  Handout 1: Types of Joints 5.117
  Handout 2: Normal Range of Movements 5.119
  Handout 3: Long Bone Structure 5.121
  Handout 4: Frontal View of Skeleton 5.122
  Handout 5: Posterior View of Skeleton 5.123
  Handout 6: Skeletal Parts 5.124
  Handout 7: Vertebrae 5.125
Lesson 7: Muscular System 5.127
  Handout 1: Types of Muscle Tissue 5.139
  Handout 2: Muscle Parts 5.140
  Handout 3: Muscles 5.141
Lesson 8: Heart and Circulation 5.143
  Handout 1: The Cardiovascular System 5.157
  Handout 2: Conduction System of the Heart 5.158
  Handout 3: Path of Circulation 5.159
Lesson 9: Cells, Blood Types, RH Factor, and Lymphatic System 5.161
  Handout 1: Formed Elements 5.175
  Handout 2: Blood 5.176
  Handout 3: The Lymphatic System 5.177
  Handout 4: Lymph Nodes 5.178
Lesson 10: Blood Vessels 5.179
  Handout 1: Blood Vessels 5.193
  Handout 2: Arteries 5.194
  Handout 3: Veins 5.195
  Handout 4: General or Systemic Circulation 5.196
  Handout 5: Pulmonary Circulation 5.197
  Handout 6: Fetal Circulation 5.198
Lesson 11: Blood Pressure 5.199
  Procedure: Measure Blood Pressure Using Palpation of the Brachial Artery ... 5.215
  Handout 1: Reading a Mercury Sphygmomanometer 5.217
  Handout 2: Reading an Aneroid Sphygmomanometer 5.219
  Handout 3: Proper Position for Taking Blood Pressure 5.221
  Handout 4: Identifying Improper Techniques for Taking Blood Pressure - Activity Sheet 5.222
Lesson 12: Temperature, Pulse, and Respirations 5.223
  Procedure: Take Oral Temperature 5.251
  Procedure: Take Rectal Temperature 5.253
  Procedure: Take Axillary Temperature 5.255
  Procedure: Count Radial Pulse 5.257
  Procedure: Count Respirations 5.259
  Handout 1: Common Thermometers (Fahrenheit) 5.261
  Handout 2: Sites for Taking a Pulse 5.262
  Handout 3: The Circulatory System Primary Pulse Points 5.263
  Handout 4: Reading a Thermometer 5.265
Lesson 13: Respiratory System 5.267
  Handout 1: Respiratory System 5.281
  Handout 2: Breathing 5.282
Lesson 14: Oxygen Therapy 5.283
Lesson 15: Tuberculosis 5.293

Lesson 16: Nervous System 5.303
  Handout 1: Neuron 5.319
  Handout 2: The Brain 5.320
  Handout 3: Reflex Arc 5.321
  Handout 4: The Nervous System 5.322
Lesson 17: The Sensory System 5.323
  Handout 1: The Sensory System - Organs of Taste and Smell 5.335
  Handout 2: Eye Structure - The Organ of Sight 5.336
  Handout 3: Anatomy of the Ear 5.337
Lesson 18: Endocrine System 5.339
  Handout 1: Endocrine System 5.351
  Handout 2: Diabetes 5.353
Lesson 19: Urinary System 5.357
  Handout 1: The Urinary System 5.367
  Handout 2: Cross Section of a Kidney 5.368
  Handout 3: Nephron 5.369
Lesson 20: Reproductive System 5.371
  Handout 1: Male Reproductive System 5.389
  Handout 2: Female Reproductive System 5.390

Unit VI: Life Stages

Lesson 1: Basic Human Needs 6.1
  Handout 1: Maslow's Hierarchy of Needs 6.11
  Handout 2: Spiritual Care 6.12
Lesson 2: Infancy - Late Childhood Life Stages 6.13
  Handout 1: Average Physical, Mental, and Social Development in Infancy 6.31
  Handout 2: Average Physical, Mental, and Social Development in Early Childhood 6.32
Lesson 3: Adolescence - Early Adulthood Life Stages 6.33
Lesson 4: Middle - Late Adulthood Life Stages 6.47
  Handout 1: Age-Related Postural Changes 6.67
Lesson 5: Mental Confusion 6.69
  Handout 1: Understanding Mental Confusion 6.83
Lesson 6: Alzheimer's Disease 6.85
Lesson 7: Death & Dying 6.97

Acknowledgments

We wish to thank the following individuals for their contributions in the development of these instructional materials. A special thank you is extended to E. June Meyer, R.N., M.A., author of the 1993 edition. Portions of the 1993 edition have been revised to create the current edition.

Project Writer

Vada Arrowood, R.N., PhD., Education Consultant, Eldon, MO

Health Care Assistant Core Competency Profile Advisory Committee

Sandy Chappell, R.N., Instructor, State Fair Community College, Sedalia, MO

Carolyn Lee, R.N., Instructor, Graff Career Center, Springfield, MO

Carolyn Lock, R.N., B.S.N., Instructor, Carrollton Area Vocational Technical School, Carrollton, MO

Jane Scott, R.N., B.S.N., Supervisor, Health Occupations Education, Department of Elementary and Secondary Education, Jefferson City, MO

Sandra Smith, R.N., Instructor, Rolla Area Vocational Technical School, Rolla, MO

Health Care Assistant Core Curriculum Development Advisory Committee Members

Beverly Browning, R.N., Instructor, Nevada Regional Technical Center, Nevada, MO

Nancy Fedorchak, R.N., Instructor, Columbia Career Center, Columbia, MO

Katie Korte, R.N., B.S.N., Instructor, Pike/Lincoln Technical Center, Eolia, MO

Sharon LeFors, R.N., B.S.N.,Instructor, Laclede AVTS, Lebanon, MO

Carolyn Lock, R.N., B.S.N., Instructor, Carrollton AVTS, Carrollton, MO

Delbert Lund, Supervisor, Vocational Planning and Evaluation, Department of Elementary and Secondary Education, Jefferson City, MO

Martha McReynolds, R.N., Instructor, Lex La-Ray Technical Center, Lexington, MO

Jane Scott, R.N., B.S.N., Supervisor, Health Occupations Education, Department of Elementary and Secondary Education, Jefferson City, MO

Instructional Materials Laboratory

Harley Schlichting, Director

Phyllis Miller, Associate Director

Dan Stapleton, Assistant Director

Veronica Feilner, Editor and Project Director

Jeannine Robling, Assistant Editor

Beth Hutchens, Editorial Assistant

Cheryl Unterschutz, Graphic Artist

Susan Ferber, Graphic Artist

Jan Trimble, Word Processor III

Foreword

Program Overview

The health occupations program has a long history of preparing entry-level workers for a career in the health care industry (primarily as certified nurse assistants) as well as introducing academic competencies, job skills, and career information as a foundation for continuing education in a health career. Over the past three years, the structure of the program has adopted a new philosophy on how to prepare high school students for entry-level health care jobs and continuing education in a health career.

The first step in this metamorphosis, which began in 1993, was the revision of the competency profile. The original competency profile consisted of nursing assistant competencies and health care assistant competencies. The advisory committee, made up of experienced health occupations instructors across Missouri, recognized that not all students in health occupations wanted to be nurses; therefore, core competencies were identified. These core competencies were identified as common for all students entering a health career and serve as a foundation for more specific skills development in students' chosen occupation area (emphasis area). The students would select an emphasis area (e.g., veterinary field, nursing, pharmacology, physical therapy) in which they learn skills for specific entry-level jobs (e.g., animal care assistant, nurse assistant, pharmacy aide, physical therapist aide) which also serve as a foundation for continuing education in that area. The core competencies combined with an emphasis area competency profile become the entire curriculum for a student. This new concept allows the instructor, parent, and student to individualize the program to the specific interests and career plans of the student.

It was reassuring to the advisory committee that in December 1994, Far West Laboratory published the first draft of the *National Health Care Skill Standards* which recommends Health Care Core Standards. It states, "The industry core is a set of broad standards that serve as a foundation for occupations and functions across the health services. These standards specify the knowledge and skills that the vast majority of health care workers would have." A copy of the *Health Care Core Standards* is listed on page xxxiii.

During the 1995 and 1996 school years, curriculum development has continued to support the needs of instructors trying to implement the concept of a core and emphasis area curriculum. The resource manual as well as the Core curriculum and emphasis area curricula have been developed. The *Resource Manual for Health Occupations Education Instructors* is designed to assist instructors in implementing their programs by providing sample forms, letters, etc., used in the program. The allied health emphasis area curricula have been developed in a student-directed, individualized format rather than in a lecture format. This format enables the instructor to facilitate and coordinate the learning process for several different health careers (emphasis areas) at the same time. Students become more involved in searching out the information and learning to be learners. Students will receive much of their actual skill training through the clinical experiences within their emphasis areas. The advantage now, as opposed to past clinical experiences, is that the curriculum is designed with clinical assignments or activities. With coordination between the health occupations instructor and the clinical supervisor, the clinical supervisor has much more detailed information about the academic component the student is learning and better direction as to what skills the student should be practicing.

Since nursing is a career with which most students are familiar and because a large number of the job openings in health care are in nursing, it is expected that a large percentage of health occupations students will be interested in the nursing emphasis area. Therefore, the instructor will most likely continue to use the traditional format to teach the competencies needed to meet the requirements for certification as a nurse assistant.

The health occupations program is usually a one-year, senior-level program for students interested in pursuing a career in a health care field. Students are enrolled in the health occupations program for three hours per day, five days per week. The program is designed to introduce students to the health care delivery system and provide academic foundations in anatomy and physiology, medical terminology, infection control, human growth and development, and communication. In addition, students learn entry-level job skills in the career area of interest.

The *Health Care Assistant Core* curriculum is taught during most of the first semester. Students learn competencies that serve as a foundation for further study in health occupations. Students have the opportunity to explore careers in the health care field, familiarizing them with the roles of workers on the health care team and assisting them in selecting an emphasis area (career area of interest). Refer to the health occupations curriculum flow chart on page xv for further clarification.

Once the core competencies are mastered, students select an emphasis area to study. Emphasis area curriculum begins late in the first semester and continues into the second semester. Second semester includes supervised clinical learning experiences and continued study in their emphasis area of interest. Each student's clinical experience is individualized to meet his or her needs and includes specific hands-on experience in the emphasis area as well as job shadowing experiences to better understand the roles of health team members.

Students who choose the nursing emphasis area should complete the skill competencies in the *Nurse Assistant in a Long-term Care Facility* curriculum (cross-referenced with *Health Care Assistant Core* curriculum) and be offered the opportunity to achieve the 100 hours of on-the-job training and to test to become a certified nurse assistant.

Students who choose an emphasis area outside of nursing may utilize one of the emphasis area curricula designed for use with the Core curriculum. These curricula are designed as self-directed instruction coordinated and facilitated by the health occupations education instructor. Clinical preceptors (instructors) are utilized to facilitate skill development and evaluation. Instructors may develop additional emphasis area instruction as needed based on the individual needs of the student.

More specific instructions for using the allied health emphasis area curricula are included in the instructional strategies section of the instructor's key for each emphasis area curriculum.

Lesson Format

The curriculum format is both student- and teacher-centered. It is an organizational tool for the instructor as well as a learning aid for the student. This manual is divided into six units: The Health Care Delivery System, Communication and Observation Skills, Safety, Concepts of Microbiology, Anatomy & Physiology, and Life Stages.

Lessons within the units allow the curriculum to be prepared in short, manageable segments. The lesson plans are color coded in the instructor's guide and contain several components.

White - This section contains the scope of the unit, lesson objectives, supplementary teaching/learning items, an informational assignment, references, and an introduction. It is usually the first two pages of the lesson.

The *scope of the unit* is a teacher-centered statement that includes the goals of the unit. It allows the reader to see the comprehensive content of the unit.

The *lesson objectives* contain a listing of skills, cognitive and psychomotor, that a student will be able to perform as a result of the lesson. It also provides a basis for the evaluation.

Items that the instructor needs for the lesson are listed under the *supplementary teaching / learning items* section. It includes handouts, supplies, audiovisuals, equipment, etc.

The *informational assignment* indicates what the students are to read or to do in order to prepare for the lesson.

References indicate items used in the development of the lesson. The instructor may find it valuable to have these on hand for additional information. Notice that a complete listing of all references used in the manual is included in this manual.

The *introduction* is intended to set the stage for the lesson; it explains the importance of the lesson.

Yellow - The outline and summary and conclusion are included on the yellow pages.

The *outline* provides the informational content of the lesson. Interaction items, which are included on the blue pages, are indicated where they tie in with the objectives. A code is used to indicate which interaction item is tied to a specific point in the outline. The code is located flush right and is in bold. For example, **(II-2)** indicates that the second interaction item could be used to stimulate discussion of the content by which it is listed. Codes such as **(II-5, 6)** or **(II-2 - 6)** indicate that multiple interaction items are tied to the content.

The *summary and conclusion* reassimilates all the information that was included in the content of the lesson. Its purpose is to reinforce learning by summarizing major components of the lesson. In some lessons, a statement showing how this lesson ties to the next lesson is also included.

Green - Green pages are only included in lessons containing procedures that will be demonstrated by the instructor. They include the steps of procedure for all demonstration objectives in the lesson.

Blue - Interaction items, classroom/laboratory activities, and answers to evaluation items are included here.

Interaction items are questions intended to stimulate and encourage student interaction during the lesson presentation. They are tied to the objectives and listed in the outline. They may be directed at the content of an entire objective or a portion of the objective. See discussion of *outline* for information on coding and placement in the outline.

Classroom/laboratory activities are designed to reinforce learning by actively engaging students in activities. Audiovisuals, teacher and student demonstrations, and exercises are some of the items noted in this section.

The *answers to evaluation items* section includes answers to activity sheets and answers to written evaluations.

Pink - Evaluation items are color-coded pink. The evaluation items are designed to measure the accomplishment of the lesson objectives. They may be written evaluations or written evaluations and skill demonstrations.

White - Handouts, like the introductory section, are on white paper. They contain additional information for the instructor and student.

All components except those contained on the blue pages are included in the student reference. In the student reference, all pages are white except the evaluation items, which are pink. The evaluation items are located together toward the back of the manual. It is recommended that the evaluation items be removed before the manuals are given to the students since mastery of the information and procedures will be evaluated using the pink pages.

Cross-referencing

The objectives, which include the competencies, from the *Nurse Assistant in a Long-Term Care Facility* curriculum have been cross-referenced to the objectives covered in the *Health Care Assistant Core* curriculum. The cross-referencing table, on page xxi of this manual, allows instructors to easily determine overlapping objectives, thus enabling instructors to quickly see which lessons or portions of lessons in the *Nurse Assistant in a Long-Term Care Facility* curriculum need to be covered for those students interested in becoming certified as nurse assistants.

A cross-reference of the *Health Care Assistant Core* to the *National Health Care Skill Standards* has also been included on page xxxvii. This cross-reference demonstrates how the Health Care Core Standards match the objectives in the *Health Care Assistant Core* curriculum. In this table, each lesson in the Core is compared to individual standards within the categories of Academic Foundation, Communication, Systems, Employability Skills, Legal Responsibilities, Ethics, Safety Practices, and Interpersonal Dynamics. More information on the significance of this alignment is included in the Program Overview section.

Health Occupations Curriculum Flow Chart

Health Care Assistant Core (All Students Complete)

A. The Health Care Delivery System
- Health Care Assistant Overview
- Health Care Team
- Ethical & Legal Responsibilities

B. Communication & Observation Skills
- Communication Skills
- Care Plan
- Observation & Reporting
- Charting on Medical Records
- Basic Telephone Techniques
- Systems of Measurement

C. Safety
- Safety Measures for the Client & Environment
- Fire, Natural Disasters, and other Emergencies
- Body Mechanics

D. Concepts of Microbiology
- Microorganisms
- Hepatitis
- Transmission of Microorganisms
- Infection Control
- Acquired Immunodeficiency Syndrome

E. Anatomy & Physiology
- Structures and Functions of the Body Systems
- Nutrition

F. Life Stages
- Basic Human Needs
- Infancy - Late Adulthood Life Stages
- Mental Confusion
- Alzheimer's Disease
- Death and Dying

G. Core Procedures for Health Care Assistants
- Vital Signs
- CPR
- Heimlich Maneuver
- Oxygen Therapy

Emphasis Areas (Students Select One)

Dental Aide	Nurse Assistant	Administrative Medical Assistant	Physical Therapist Aide	Pharmacy Aide	Animal Care Assistant
A. Introduction to Dentistry	A. Nurse Assistant Responsibilities	A. Introduction to Medical Assisting	A. Explore Field of Physical Therapy	A. Introduction to Pharmacy	A. Animal Care Assistant Overview
B. Basic Office Procedures	B. Understanding the Elderly	B. Communication Skills	B. Basic Patient Care	B. Communication Skills	B. Communication Skills
C. Infection Control & Occupational Safety	C. Safety	C. Safety	C. Patient Mobility	C. Pharmaceuticals	C. Basic Office Procedures
D. Basic Anatomy of the Oral Cavity	D. Food Service	D. Office Management Techniques	D. Assisting with Treatment	D. Prescription Processing	D. Animal Identification
E. Operative Equipment	E. Personal Care	E. The Medical Record	E. ROM Exercises & Ambulation	E. Maintaining the Pharmacy	E. Sanitation
F. Dental Radiology	F. Elimination	F. Insurance & Finance	F. Maintaining Treatment Areas	F. Business Operations	F. Animal Care
G. Basic Lab Procedures	G. Restorative Nursing		G. Office Communication		G. Assisting with Animal Treatments/Procedures
	H. Special Procedures				H. Clinic Procedures
					I. Equipment Identification and Care

Bibliography

AIDS Education Resource Guide. Jefferson City, MO: Missouri Department of Elementary and Secondary Education, 1990.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991.

Annual Report HIV, 1992. Missouri Department of Health, American Medical Association, Division of Health Science, 515 North State Street, Chicago, IL 60610, *HIV Early Care AMA Physicians Guidelines*, 1990.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Burhoe, Steven. *Bloodborne Pathogens, An Overview of OSHA's Standards: Highlights and References for Health Care Providers Level I*. University of Missouri-Columbia, Instructional Materials Laboratory, 1992.

Burnside, Irene M. *Nursing and the Aged*. Hightown, NJ: McGraw-Hill Publishing Co., 1988.

Centers for Disease Control. *Perspectives in Disease Prevention and Health Promotion*. MMWR, 1988.

DeWit, Susan C. *Keane's Essentials of Medical-Surgical Nursing*. 3rd ed. Philadelphia: W.B. Saunders, Co., 1992.

Eliopoulos, Charlotte, *Gerontology Nursing*. 2nd ed. Philadelphia, PA: J.B. Lippincott Co., 1987. Chapter 17.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Gentry, Linda. *Confused Resident Care*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Gibb, Betty. *Certified Quality Inspection*. Unit 8: Introduction to Communications. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Grubbs, Peggy A.; Barbara A. Blasband. *The Long-Term Care Nursing Assistant*. Englewood Cliffs, N.J.: Prentice Hall, Inc., 1995.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991.

Hegner, Barbara R.; Ester Caldwell. *Nursing Assistant: A Nursing Process Approach*, 6th ed. Albany, NY: Delmar Publishers, 1992.

Hepatitis A Fact Sheet. Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

Hepatitis B Fact Sheet. Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

Hepatitis C Fact Sheet. Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

Hepatitis: Everything from A to E. Abbott Park, IL: Abbott Laboratories, 1993.

HIV/AIDS Newsletter. Missouri Department of Health, Bureau of AIDS Prevention, January-March 1993.

Holt, Sharyn; Marlys Denny. *Core Employment Skills*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Hroneck, Dennis. *Radiology Aide*. Columbia: Instructional Materials Laboratory, University of Missouri-Columbia, 1987.

Infection Control Protocol for Student Clinical Experiences: A Protocol Document for Health Occupations Programs in Missouri. Columbia, MO: Instructional Materials Laboratory, 1994.

Infection Prevention and Control Manual. University of California San Diego Medical Center, Epidemiology Unit, 1987.

Injury in Missouri. Jefferson City, MO: Missouri Department of Health, Missouri Center for Health Statistics, 1992.

Kast, Barbara. *Competency Exam Prep and Review for Nursing Assistants*. 1st ed. Albany, NY: Delmar Publishers, 1990.

Kübler-Ross, Elisabeth. *On Death and Dying*. New York, NY: McMillan Publishing Co., 1969.

Lefrancois, Guy R. *The Lifespan*. 4th ed. Belmont, CA: Wadsworth Publishing Company, 1993.

Medication Technician. Revised ed. University of Missouri-Columbia: Instructional Materials Laboratory, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

Missouri Department of Health. *Important AIDS Information for Health Professionals*. Jefferson City: Missouri Division of Health, 1985.

Missouri Dietetic Association and Missouri Division of Health. *Missouri Diet Manual*. 7th ed. 1992.

Mosby's Medical and Nursing Dictionary, 4th ed. St. Louis, MO: The C. V. Mosby Company, 1994.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Prevention and Control of Tuberculosis in Facilities Providing Long-Term Care to the Elderly: Recommendation of the Advisory Committee for Elimination of Tuberculosis. Atlanta, GA. U.S. Department of Health and Human Services, Center for Disease Control.

Restorative Nurse Assistant. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Safety Tips for Earthquakes. Federal Emergency Management Agency, July, 1982.

Schere, Jeanne C. *Introductory Medical-Surgical Nursing*. 4th ed. Philadelphia: J.B. Lippincott, 1986.

Schniedman, Rose, Susan Lambert; Barbara Wander. *Being a Nursing Assistant*. 5th ed. The Hospital Research and Educational Trust, Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1989.

Schwartz, Estelle and Lillian Potter. *Foundations of Patient Care*. Philadelphia: J.B. Lippincott, 1981.

Shalala, D., et.al. *FDA Consumer Special Report: Focus on Food Labeling*. Rockville, MD: Food and Drug Administration. 1993.

Simmers, Louise. *Diversified Health Occupations*. 2nd ed. Albany: NY. Delmar Publishers, Inc., 1988.

Sorrentino, Sheila. *Mosby's Textbook for Nursing Assistants*, 3rd ed. St. Louis, MO: Mosby Year Book Inc., 1992. Chapter 10.

State of Missouri. *Long-Term Care Facility Regulations and Licensure Law for Residential Care Facilities I and II, Intermediate Care Facilities, and Skilled Nursing Facilities*. Department of Social Services, Division of Aging, 1991. (Current manual should be used.)

Summer, Sara. "An Update on BCLS Standards." *Nursing '86*, (November 1986), pp 48-49.

U.S. Public Health Service. *Surgeon General's Report on Acquired Immune Deficiency Syndrome*.

U.S. Department of Health and Human Services. *Recommendations for Prevention of HIV Transmission in Health-Care Settings*. Vol. 36/No. 25. Atlanta: Centers for Disease Control, 1987.

Ulene, Art. *Safe Sex in a Dangerous World; Understanding and Coping with the Threat of AIDS*. New York: Random House, 1987.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990.

Woodrow, Ruth. *Essentials of Pharmacology for Health Occupations*, 2nd ed. Albany, New York: Delmar Publishers, Inc., 1992.

Cross-Reference of *Nurse Assistant in a Long-Term Care Facility* and *Health Care Assistant Core*

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
UNIT I: THE NURSE ASSISTANT	
Lesson 1 - Becoming a Nurse Assistant	
1. Match terms presented in this lesson to correct definitions.	
2. List seven goals of the course.	
3. Describe the requirements of the course.	
4. Establish effective study habits.	Unit I, Lesson 1
5. Describe four factors that help a nurse assistant become successful.	
6. Name four personal qualities of the nurse assistant.	Unit I, Lesson 1
7. Explain two ways to organize work.	
Lesson 2 - Long-Term Health Care	
1. Match terms presented in this lesson to correct definitions.	Unit I, Lesson 2
2. Match selected health care team members with their major responsibilities in a long-term care facility.	Unit I, Lesson 2
3. Describe the lines of authority the nurse assistant should follow.	Unit I, Lesson 2
Lesson 3 - Ethical and Legal Responsibilities	
1. Match terms presented in this lesson to correct definitions.	Unit I, Lesson 3
2. Identify techniques of proper documentation.	Unit I, Lesson 3
3. List six resident's rights.	Unit I, Lesson 3
4. Identify who should be notified if abuse, neglect, or exploitation is suspected.	Unit I, Lesson 3
5. List five areas of information needed when reporting an abuse, neglect, or exploitation case.	Unit I, Lesson 3
6. Explain the term grievance.	Unit I, Lesson 3
7. Describe the legal responsibilities of a nurse assistant.	Unit I, Lesson 3
Lesson 4 - Observation and Reporting	
1. Match terms presented in this lesson to correct definitions.	Unit II, Lesson 3
2. List five methods of observation.	Unit II, Lesson 3
3. Identify changes in resident's usual appearance and behavior that are to be reported.	Unit II, Lesson 3
4. Identify guidelines for reporting observations of status change in residents to charge personnel.	Unit II, Lesson 3
Lesson 5 - Charting on Medical Records	
1. Define terms presented in this lesson.	Unit II, Lesson 4
2. Match common abbreviations and symbols with correct terms.	Unit II, Lesson 4
3. Chart observations using basic guidelines.	Unit II, Lesson 4
Lesson 6 - Communication Skills	
1. Define the terms communication and aphasia.	Unit II, Lesson 1
2. Identify the five elements of communication.	Unit II, Lesson 1
3. Explain the difference between verbal and nonverbal communication.	Unit II, Lesson 1

BEST COPY AVAILABLE

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
4. Identify factors that promote effective communication.	Unit II, Lesson 1
5. Identify the correct way to answer the telephone.	Unit II, Lesson 1
6. Identify the difference between hearing and listening.	Unit II, Lesson 1
7. Identify barriers that prevent effective communication.	Unit II, Lesson 1
8. List conditions that a resident may have that makes communication with him/her difficult.	Unit II, Lesson 1
Lesson 7 - Orientation to The Long-Term Environment	
1. Identify equipment and furniture located in the resident's room.	
2. Identify the correct placement of a signal light.	
3. Differentiate between the clean and dirty utility room.	
4. Describe the nurse assistant's responsibilities in the dining room, activity room, and nurse's station.	
Lesson 8 - Care Plan	
1. Match terms presented in this lesson to correct definitions.	Unit II, Lesson 2
2. Describe a care plan.	Unit II, Lesson 2
3. Identify how care plan is developed.	Unit II, Lesson 2
4. Identify goals of care plan.	Unit II, Lesson 2
5. List factors that may cause the resident to be unable to meet his/her needs.	Unit II, Lesson 2
6. List ways in which the nurse assistant can contribute to the care plan.	Unit II, Lesson 2
7. List four ways in which the care plan is of assistance to the nurse assistant.	Unit II, Lesson 2
UNIT II: UNDERSTANDING THE ELDERLY	
Lesson 9 - The Aging Process and Related Health Problems	
1. Match terms presented in this lesson to correct definitions.	
2. Identify one physical sign of aging from each body system.	Unit VI, Lesson 2, 3, 4
3. Match health problems to appropriate definitions.	
4. Identify nursing measures to help the aging resident with certain health problems.	Unit VI, Lesson 2, 3, 4
Lesson 10 - Emotional Needs	
1. Identify how the nurse assistant can meet the resident's basic physical needs.	Unit VI, Lesson 1
2. Identify how the nurse assistant can meet the resident's safety and security needs.	Unit VI, Lesson 1
3. Identify how the nurse assistant can meet the resident's need for love and belonging.	Unit VI, Lesson 1
4. Identify how the nurse assistant can meet the resident's need for self-esteem.	Unit VI, Lesson 1
5. Identify how the nurse assistant can meet the resident's need to reach full potential.	Unit VI, Lesson 1
6. Identify major losses the resident may have experienced.	Unit VI, Lesson 4
7. Identify tasks the elderly must accomplish for successful aging.	Unit VI, Lesson 4
8. List ways in which the resident may cope if emotional needs are not met.	Unit VI, Lesson 4
9. Identify various nursing approaches to satisfying the emotional needs of the resident.	Unit VI, Lesson 1
Lesson 11 - Dealing with the Mental Confusion	
1. Match terms introduced in this lesson to correct definitions.	Unit VI, Lesson 5

BEST COPY AVAILABLE

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
2. Name two methods of identifying confused residents.	Unit VI, Lesson 5
3. List three causes of confusion.	Unit VI, Lesson 5
4. Name two emotional or physical responses resulting from confusion.	Unit VI, Lesson 5
5. List two behavioral responses resulting from confusion.	Unit VI, Lesson 5
6. List two functional responses resulting from confusion.	Unit VI, Lesson 5
7. Identify correct nursing approaches for the confused resident.	Unit VI, Lesson 5
8. Identify correct methods of dealing with problem behaviors resulting from confusion.	Unit VI, Lesson 5
Lesson 12 - Activities in the Long-Term Care Facility	
1. Describe four types of activities	
2. Identify responsibilities of the nurse assistant in resident activities.	
3. Identify ways the nurse assistant may participate in the activity program for the resident.	
Lesson 13 - Death and Dying	
1. Define terms presented in this lesson.	Unit VI, Lesson 7
2. Identify factors that affect a person's attitude about death.	Unit VI, Lesson 7
3. List the five stages of dying.	Unit VI, Lesson 7
4. Identify key points of psychological and spiritual needs of the dying resident.	Unit VI, Lesson 7
5. Identify specific physical changes associated with the dying process.	Unit VI, Lesson 7
6. List four nursing care measures to comfort the dying resident.	
7. List five signs of death.	Unit VI, Lesson 7
8. Identify key points in the care of the body after death.	
9. Identify the nurse assistant's feelings toward death.	Unit VI, Lesson 7
10. Give postmortem care according to steps of procedure.	
UNIT III: SAFETY	
Lesson 14 - Safety Measures for The Resident and The Environment	
1. Identify causes of accidents.	Unit III, Lesson 1
2. List which residents require specific safety measures.	Unit III, Lesson 1
3. Identify ways the nurse assistant can help prevent falls.	Unit III, Lesson 1
4. Identify ways the nurse assistant can help prevent fires and burns.	Unit III, Lesson 1
5. Identify ways the nurse assistant can help prevent poisoning.	Unit III, Lesson 1
6. Describe nursing care measures to ensure resident safety.	Unit III, Lesson 1
7. List two reasons for applying safety devices.	Unit III, Lesson 1
8. Describe the use of safety devices.	Unit III, Lesson 1
9. Identify principles in applying restraints.	Unit III, Lesson 1
Lesson 15 - Fire, Natural Disasters, and Other Emergencies	
1. Match terms presented in this lesson to correct definitions.	Unit III, Lesson 2
2. Identify fire prevention.	Unit III, Lesson 2
3. Describe what to do in case of fire.	Unit III, Lesson 2

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
4. Distinguish between a tornado watch and a tornado warning.	Unit III, Lesson 2
5. Discuss what actions should be taken should an earthquake occur.	Unit III, Lesson 2
6. Identify steps to control hemorrhage from a cut.	Unit III, Lesson 2
7. Explain the proper steps to follow should a resident fall.	Unit III, Lesson 2
8. List observations that should be made during a seizure.	Unit III, Lesson 2
9. Identify precautions to avoid choking while feeding a resident.	Unit III, Lesson 2
10. Clear airway of obstruction in conscious resident according to steps of procedure.	Unit III, Lesson 2
11. Clear airway of obstruction in unconscious resident according to steps of procedure.	Unit III, Lesson 2
Lesson 16 - Infection Control	
1. Match terms presented in this lesson to correct definition.	Unit IV, Lesson 1, 2, and 3
2. Identify three requirements for the growth of microorganisms.	Unit IV, Lesson 1
3. List five ways bacteria are spread.	Unit IV, Lesson 2
4. List four ways viruses are spread.	Unit IV, Lesson 2
5. Identify how organisms enter the body.	Unit IV, Lesson 2
6. Identify how organisms leave the body.	Unit IV, Lesson 2
7. Identify who is considered a susceptible host.	Unit IV, Lesson 2
8. Identify Body Substance Precautions.	Unit IV, Lesson 3
9. List three specific control measures that prevent the spread of infection.	Unit IV, Lesson 3
10. Identify when hand washing should be done.	Unit IV, Lesson 3
11. Wash hands according to steps of procedure.	Unit IV, Lesson 3
Lesson 17 - Isolation Techniques	
1. Describe the purpose of isolation techniques.	Unit IV, Lesson 3
2. Identify feelings the resident in isolation may experience.	Unit IV, Lesson 3
3. Match each type of isolation to the correct reason for its use.	
4. Identify proper isolation techniques.	
5. Identify important factors when following isolation procedure.	
6. State the definition of terminal disinfection.	
7. Don and remove daily care nonsterile gloves.	Unit IV, Lesson 3
8. Don and remove mask.	Unit IV, Lesson 3
9. Don and remove gown.	Unit IV, Lesson 3
UNIT IV: FOOD SERVICE	
Lesson 18 - Nutrition	
1. Match terms presented in this lesson to correct definition.	Unit V, Lesson 5
2. Name the five categories of nutrients.	Unit V, Lesson 5
3. List foods included in each of the four food groups.	Unit V, Lesson 5
4. Identify foods from six special diets commonly ordered in long-term care facilities.	Unit V, Lesson 5
5. Identify two methods of providing a nutritionally complete liquid diet.	Unit V, Lesson 5
6. Discuss the importance of non-nutrients.	Unit V, Lesson 5
7. Discuss the nutritional needs of the elderly.	Unit V, Lesson 5

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
Lesson 19 - Serving, Feeding, and Monitoring	
1. List three considerations involved with preparing residents for mealtime.	
2. Explain how to prepare and serve food trays.	
3. Identify key points in assisting a resident to eat.	
4. Identify key points in feeding a resident.	
5. Describe after-meal care for a resident.	
6. Identify key points in meeting nutritional needs of residents with special eating problems.	
7. Identify observations to report for residents receiving feeding by tubes.	
8. Feed a helpless resident according to steps of procedure.	
Lesson 20 - Observe, Measure, and Record Fluid Intake and Output	
1. Define terms presented in this lesson.	
2. List three routes to administer fluids.	
3. Identify key points in measuring intake and output.	
4. List four fluids which must be measured for oral intake.	
5. Transfer household measurement equivalents to cubic centimeters.	Unit II, Lesson 6
6. Define what is meant by the term "frequent fluids."	
7. Identify four methods of administering frequent fluids.	
Convert liquid measurements in ounces to cubic centimeters (milliliters).	Unit II, Lesson 6
9. Distribute drinking water according to steps of procedure.	
10. Measure fluid intake according to steps of procedure.	
UNIT V: PERSONAL CARE	
Lesson 21 - Personal Care for The Resident	
1. Define terms presented in this lesson.	
2. Identify activities that make up personal care.	
3. Identify points to consider when planning personal care.	
4. Identify residents who need assistance with general hygiene.	
5. Identify appropriate clothing for resident.	
6. Identify key points involved in providing personal care.	
7. Identify points to remember when performing personal care activities.	
8. Identify adaptive measures that may be necessary to take when giving personal care to residents with special conditions.	
9. Shave resident with safety razor according to steps of procedure.	
10. Shave resident with electric razor according to steps of procedure.	
Lesson 22 - Oral Hygiene	
1. Define terms presented in this lesson.	
2. List four purposes of oral hygiene.	
3. Identify when residents should have oral hygiene.	
4. List three observations the nurse assistant can make while giving oral hygiene.	

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
5. Identify four key points in the care of dentures.	
6. Assist with oral hygiene according to steps of procedure.	
7. Administer oral hygiene to the helpless/unconscious resident according to steps of procedure.	
8. Provide denture care according to steps of procedure.	
Lesson 23 - Nail Care	
1. List two purposes of nail care.	
2. Identify three observations to make when giving nail care.	
3. Identify three specific measure related to nail care.	
4. Give fingernail care according to steps of procedure.	
5. Give toenail care according to steps of procedure.	
Lesson 24 - Hair Care	
1. List three purposes of hair care.	
2. Identify when hair care should be done.	
3. Identify two observations to make when giving hair care.	
4. Identify three specific measures related to hair care.	
5. Comb/brush hair according to steps of procedure.	
6. Give shampoo during tub bath/shower bath according to steps of procedure.	
7. Give bed shampoo according to steps of procedure.	
Lesson 25 - Perineal Care	
1. Match terms presented in this lesson to correct definitions.	
2. List two purposes of peri care.	
3. Identify when peri care should be given.	
4. Identify two specific observations to make while giving peri care.	
5. Identify two specific measures to take while giving peri care.	
6. Give perineal care for the male resident according to steps of procedure.	
7. Give perineal care for the female resident according to steps of procedure.	
Lesson 26 - Dressing and Undressing	
1. Identify five key points of dressing and undressing.	
2. Assist the resident to dress according to steps of procedure.	
3. Assist the resident to undress according to steps of procedure.	
Lesson 27 - Bed Bath	
1. List four purposes of bathing.	
2. Describe the difference between a complete bed bath and a partial bed bath.	
3. Identify five specific measures related to giving a bed bath.	
4. Give complete bed bath according to steps of procedure.	
Lesson 28 - Tub Bath and Shower Bath	
1. Identify three safety measures to follow while give a tube bath.	
2. Identify three safety measures to follow while give a shower bath.	
3. Identify observations to be made during a tub bath or shower.	

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
4. Give tub bath according to the steps of procedure.	
5. Give shower bath according to steps of procedure.	
Lesson 29 - Backrub/Skin Care	
1. Identify three purposes of backrub/skin care.	
2. List five observations to make while giving a backrub/skin care.	
3. Identify four specific measures related to backrub/skin care.	
4. Give backrub according to steps of procedure.	
Lesson 30 - Bed Making (Unoccupied/Occupied)	
1. Describe the difference between an unoccupied bed and an occupied bed.	
2. Identify three key points relating to bed making.	
3. Make an unoccupied bed according to the steps of procedure.	
4. Make an occupied bed according to the steps of procedure.	
UNIT VI: ELIMINATION	
Lesson 31 - Elimination of Urine	
1. Match terms presented in this lesson to correct definitions.	
2. Identify two factors which maintain urine elimination.	
3. Describe the characteristics of normal urine.	
4. Identify three conditions that may cause abnormal urine elimination.	
5. Identify three factors that can lead to urinary incontinence.	
6. List two special measures for abnormal urinary function.	
7. Identify key points in giving and removing urinals and bedpans.	
8. Give peri care with catheter according to the steps of procedure.	
9. Change a drainage bag according to the steps of procedure.	
10. Assist resident in using urinal according to the steps of procedure.	
11. Assist resident in using bedpan according to the steps of procedure.	
12. Collect a routine urine specimen according to the steps of procedure.	
Lesson 32 - Elimination of Stool	
1. Match terms presented in this lesson to correct definitions.	
2. List four factors that maintain normal bowel function.	
3. Describe the characteristics of normal stool.	
4. Describe the characteristics of abnormal stool.	
5. Identify four conditions that may cause abnormal bowel function.	
6. List five factors that lead to constipation.	
7. Identify two special measures for abnormal bowel function.	
8. Administer an unmedicated enema according to steps of procedure.	
Lesson 33 - Bladder and Bowel Retraining	
1. Define terms presented in this lesson.	
2. Identify key concepts of a bladder retraining program.	
3. Identify responsibilities of the nurse assistant in a bladder retraining program.	

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
4. Identify responsibilities of the nurse assistant in a habit training program for residents with chronic bladder incontinence.	
5. Identify responsibilities of the nurse assistant in a bowel training program.	
UNIT VII: RESTORATIVE NURSING	
Lesson 34 - Principles of Restorative Nursing	
1. Define restorative nursing and orthostatic hypotension.	
2. List three reasons for providing restorative nursing.	
3. Identify four complications of immobility that must be prevented.	
4. Identify key points of positioning residents confined to bed.	
5. Identify the goals of restorative nursing.	
6. Identify how the goals of restorative nursing can be accomplished.	
Lesson 35 - Using Body Mechanics to Lift and Move Residents	
1. Define body mechanics.	Unit III, Lesson 3
2. Identify five reasons body mechanics are important.	Unit III, Lesson 3
3. Identify key points of body mechanics.	Unit III, Lesson 3
4. Identify additional points to consider when moving a resident or object.	Unit III, Lesson 3
5. Identify principles of lifting and moving a resident.	Unit III, Lesson 3
6. Move/assist resident to head of bed according to the steps of procedure.	
7. Move helpless resident to head of bed according to the steps of procedure.	
8. Move resident to one side of the bed according to the steps of procedure.	
9. Turn resident to side according to the steps of procedure.	
10. Turn resident to prone position according to the steps of procedure.	
Lesson 36 - Transferring Residents	
1. Describe two methods of active assistive transfer.	
2. Identify five safety measures to observe when transferring residents.	
3. Identify three pieces of equipment used for transfer activities.	
4. Identify what areas of the body must be checked for proper body alignment.	
5. Describe the method of properly positioning a resident in the chair.	
6. Transfer resident from bed to chair according to the steps of procedure.	
7. Transfer resident from chair to bed according to the steps of procedure.	
8. Use mechanical life to transfer a resident according to the steps of procedure.	
Lesson 37 - Ambulation	
1. List three purposes of ambulation.	
2. List reasons why the resident may need assistance in ambulating.	
3. Identify four nursing responsibilities when assisting the resident with ambulation.	
4. Identify four types of equipment that may be used to assist with ambulating a resident.	
5. Ambulate resident using a gait belt according to the steps of procedure.	
6. Ambulate resident using a walker according to the steps of procedure.	

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
7. Ambulate resident using a cane according to the steps of procedure.	
Lesson 38 - Range of Motion Exercises	
1. Match terms presented in this lesson to correct definitions.	
2. List the purposes of range of motion exercises.	
3. List the nurse assistant's responsibilities when giving range of motion exercise.	
4. Give range of motion exercises according to steps of procedure.	
UNIT VIII: SPECIAL PROCEDURES	
Lesson 39 - Admission to a Long-Term Care Facility	
1. Identify feelings the resident may have upon admission to a long-term care facility.	
2. Identify the nurse assistant's responsibilities when a resident is admitted to a long-term care facility.	
Lesson 40 - In-House Transfer or Discharge	
1. Identify the purpose of an in-house transfer.	
2. Identify the nurse assistant's responsibility in the transfer of the resident.	
3. Define discharge.	
4. Identify the nurse assistant's responsibility in discharge of the resident to a hospital.	
5. Identify the nurse assistant's responsibility in discharge of the resident to the home or other LTC facility.	
esson 41 - Temperature, Pulse, and Respirations (TPR)	
1. Match terms presented in this lesson to correct definitions.	Unit V, Lesson 12
2. Identify the normal range of body temperature for elderly persons.	Unit V, Lesson 12
3. Identify three types of thermometers.	Unit V, Lesson 12
4. Identify four ways to take a temperature.	Unit V, Lesson 12
5. List three conditions that would indicate not to take temperature by the oral route.	Unit V, Lesson 12
6. Describe the length of time to take a temperature for each route.	Unit V, Lesson 12
7. Identify the normal pulse range for the elderly adult.	Unit V, Lesson 12
8. List five locations at which a pulse can be checked.	Unit V, Lesson 12
9. Identify the normal range for respirations.	Unit V, Lesson 12
10. List three signs of normal respirations.	Unit V, Lesson 12
11. Take oral temperature according to the steps of procedure.	Unit V, Lesson 12
12. Take rectal temperature according to the steps of procedure.	Unit V, Lesson 12
13. Take axillary temperature according to the steps of procedure.	Unit V, Lesson 12
14. Count radial pulse according to the steps of procedure.	Unit V, Lesson 12
15. Count respirations according to the steps of procedure.	Unit V, Lesson 12
Lesson 42 - Blood Pressure	
1. Match terms presented in this lesson to correct definitions	Unit V, Lesson 11
2. Distinguish between systolic and diastolic blood pressures.	Unit V, Lesson 11
3. Identify the normal range for systolic blood pressure.	Unit V, Lesson 11

Nurse Assistant in a Long-Term Care Facility	Health Care Assistant Core
4. Identify the normal range for diastolic blood pressure.	Unit V, Lesson 11
5. Identify equipment used to take a blood pressure.	Unit V, Lesson 11
6. Identify key points in measuring blood pressure.	Unit V, Lesson 11
7. Measure blood pressure according to the steps of procedure. NOTE: Core procedure includes palpation of the brachial artery.	Unit V, Lesson 11
Lesson 43 - Measuring Weight and Height	
1. List two types of scales that can be used to weigh a resident.	
2. Identify key points in weighing the resident.	
3. Identify key points in measuring height of a resident in bed and on an upright scale.	
4. Convert a measurement of inches into feet and inches.	
5. Explain how much weight gain or loss in one month should be reported to the charge nurse.	
6. Measure weight of resident according to the steps of procedure.	
7. Measure height of resident according to the steps of procedure.	
Lesson 44 - Applying Heat and Cold	
1. Identify the purpose of applying heat.	
2. List three uses for heat application.	
3. Identify three types of heat application.	
4. Identify signs of complications of heat application.	
5. Identify the purpose of applying cold.	
6. List three uses for cold applications.	
7. Identify three types of cold applications.	
8. Identify signs of complications of cold application.	
9. Identify safety measures to follow when applying heat and cold.	
10. Apply warm, moist compress according to the steps of procedure.	
11. Apply aquamatic K-pad according to the steps of procedure.	
12. Apply warm water bottle according to the steps of procedure.	
13. Apply an ice bag/ice cap according to the steps of procedure.	
Lesson 45 - Preventing and Caring for Decubitus Ulcers	
1. Describe the main cause of decubitus ulcers.	
2. List four pressure areas.	
3. Identify three residents prone to formation of decubitus ulcers.	
4. List three early signs of a decubitus ulcer.	
5. Describe ways the nurse assistant can help prevent decubitus ulcers.	
6. List observations that should be made about a decubitus ulcer.	
7. Give decubitus care according to steps of procedure.	
Lesson 46 - Oxygen Therapy	
1. List two types of oxygen containers.	Unit V, Lesson 14
2. List two methods of administering oxygen.	Unit V, Lesson 14
3. Identify five safety measures to follow when administering oxygen.	Unit V, Lesson 14
4. Identify five comfort measures to follow when administering oxygen.	Unit V, Lesson 14

National Health Care Core Skill Standards

The *National Health Care Skill Standards*, published by Far West Laboratory, is a set of broad standards that serve as a foundation to occupations and functions across the health services. On pages 14-17 of the *National Health Care Skill Standards* are the "National Health Care Core Skill Standards." These standards specify the knowledge and skills that the vast majority of health care workers should have. To identify the core standards found in the *Health Care Assistant Core*, see the cross-reference table on the following pages.

Proposed Standards:

Academic Foundation

Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role.

The following may be included:

AF1 · Read and write, including charts, reports, and manuals

AF2 · Perform mathematical functions

AF3 · Use health care terminology

AF4 · Apply knowledge of life science, such as biology, chemistry, physics, and human growth and development

AF5 · Be aware of the history of health care

Communication

Health care workers will know various communication methods to give and obtain information. They will communicate effectively, both orally and in writing.

The following may be included:

C1 · Assess others' ability to understand

C2 · Adapt communication to individual needs, including paraphrasing or translating

C3 · Ask for clarification when needed

C4 · Be sensitive to multi cultural and multilingual needs

C5 · Use facility-specific guidelines and methods of sending and receiving information

C6 · Access and use electronically-produced information

Systems

Health care workers will understand how their role fits in with their department, their setting, and the overall health care environment. They will identify how key systems relate to the services they perform and affect quality of care.

The following may be included:

S1 • Be aware of the range of services offered

S2 • Be aware of how reimbursement affects care delivery

S3 • Prevent unnecessary waste and duplication

S4 • Fully use available facility resources, such as where to find help or information

Employability Skills

Health care workers will understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate key employability skills and will maintain and upgrade skills, as needed.

The following may be included:

ES1 • Exhibit personal skills, such as attendance, time management, and individual responsibility

ES2 • Maintain professional conduct and appearance

ES3 • Use analytical skills to solve problems and make decisions

ES4 • Adapt to changing situations

ES5 • Upgrade technology skills as needed

ES6 • Understand various career options and the preparation required for them

ES7 • Anticipate needs of clients and coworkers.

Legal Responsibilities

Health care workers will understand their legal responsibilities, limitations, and the implications of their actions within the health are delivery setting. They will perform their duties in accordance with laws, regulations, policies, and legislated rights of clients.

The following may be included:

CR1 • Be aware of malpractice and liability issues

CR2 • Maintain client confidentiality

CR3 • Operate within scope of practice

CR4 • Comply with legal requirements for documentation

Ethics

Health care workers will understand accepted ethical practices with respect to cultural, social, and ethnic differences, particularly within the health care environment. They will perform their duties within established ethical guidelines, supporting sensitive and quality health care delivery.

The following may be included:

E1 • Exhibit loyalty to fellow workers and the organization

E2 • Respect client rights and self-determination

E3 • Promote justice and equal treatment of all persons

E4 • Recognize the importance of client need over other considerations

E5 • Report any activity that adversely affects the health, safety, or welfare of clients of fellow workers.

Safety Practices

Health care workers will be aware of the existing and potential hazards to clients, coworkers, and self. They will prevent injury or illness through safe work practices and follow health and safety policies and procedures.

The following may be included:

SP1 • Use Universal Precautions to control the spread of infection

SP2 • Apply principles of body mechanics, such as proper lifting techniques

SP3 • Prevent fire and electrical hazards

SP4 • Use instruments and equipment as directed

SP5 • Manage hazardous materials

SP6 • Follow emergency procedures and protocols

SP7 • Apply pertinent regulatory guidelines, including OSHA standards

Interpersonal Dynamics

Health care workers will understand the role and responsibility of individual members as part of the health care team, including their ability to promote the delivery of quality health care. They will interact effectively an sensitively with all members of the health care team.

The following may be included:

- ID1 • Practice team membership skills, such as cooperation, leadership, and listening
- ID2 • Respect cultural and religious differences of team members
- ID3 • Be aware of the implications of the health care hierarchy in interaction with others
- ID4 • Manage conflict within the work place through consideration of others' points of view
- ID5 • Respect inter- and intra-disciplinary issues

Cross-Reference of the *National Health Care Core Skill Standards* and *Health Care Assistant Core*

IML Core Unit & Lesson	Academic Foundation AF	Communi-cation C	Systems S	Employability Skills ES	Legal Respons. LR	Ethics E	Safety Practices SP	Interpersonal Dynamics ID
Unit 1, Lesson 1: Health Care Assistant				ES-1 ES-2				
Unit 1, Lesson 2: Health Care Team	AF-3		S-1					ID-1 ID-3 ID-5
Unit 1, Lesson 3: Ethical and Legal Responsibilities	AF-3				LR-4	E-1 E-2 E-3 E-4 E-5		
Unit 2, Lesson 1: Communication Skills	AF-3 AF-4	C-1 C-2 C-3 C-4 C-5						
Unit 2, Lesson 2: Care Plan		C-4						
Unit 2, Lesson 3: Observation and Reporting	AF-3	C-5				E-5		
Unit 2, Lesson 4: Charting on Medical Records	AF-3 AF-1	C-5			LR-4			
Unit 2, Lesson 5: Basic Telephone Techniques		C-5 C-6			LR-2			
Unit 2, Lesson 6: Systems of Measurement	AF-3 AF-2			ES-3 ES-4				
Unit 3, Lesson 1: Safety Measures for the Client and the Environment							SP-2 SP-3 SP-4 SP-5 SP-6	
Unit 3, Lesson 2: Fire, Natural Disasters, and Other Emergencies	AF-3						SP-2 SP-3 SP-6	
Unit 4, Lesson 1: Microorganisms							SP-2	
Unit 4, Lesson 2: Transmission of Microorganisms	AF-3 AF-4							
Unit 4, Lesson 3: Infection Control	AF-3 AF-4							
Unit 4, Lesson 4: Acquired Immunodeficiency Syndrome and the Health Care Worker	AF-3 AF-4							
Unit 4, Lesson 5: Hepatitis	AF-3 AF-4							
Unit 5, Lesson 1: The Body as a Whole	AF-3 AF-4							
Unit 5, Lesson 2: Organization of the Body	AF-3 AF-4							

IML Core Unit & Lesson	Academic Foundation AF	Communi -cation C	Systems S	Employability Skills ES	Legal Respons. LR	Ethics E	Safety Practices SP	Interpersonal Dynamics ID
Unit 5, Lesson 3: Skin System	AF-3 AF-4							
Unit 5, Lesson 4: Digestive System	AF-3 AF-4							
Unit 5, Lesson 5: Nutrition	AF-3							
Unit 5, Lesson 6: Skeletal System	AF-3 AF-4							
Unit 5, Lesson 7: Muscular System	AF-3 AF-4						SP-2	
Unit 5, Lesson 8: Heart and Circulation	AF-3 AF-4							
Unit 5, Lesson 9: Cells, Blood Types, RH Factor, and Lymphatic System	AF-3 AF-4							
Unit 5, Lesson 10: Blood Vessels	AF-3 AF-4							
Unit 5, Lesson 11: Blood Pressure	AF-3 AF-4							
Unit 5, Lesson 12: Temperature, Pulse, and Respirations	AF-3 AF-4							
Unit 5, Lesson 13: Respiratory System	AF-3 AF-4							
Unit 5, Lesson 14: Oxygen Therapy	AF-4						SP-5	
Unit 5, Lesson 15: Tuberculosis	AF-3 AF-4						SP-7	
Unit 5, Lesson 16: Nervous System	AF-3 AF-4							
Unit 5, Lesson 17: The Sensory System	AF-3 AF-4							
Unit 5, Lesson 18: Endocrine System	AF-3 AF-4							
Unit 5, Lesson 19: Urinary System	AF-3 AF-4							
Unit 5, Lesson 20: Reproductive System	AF-3 AF-4							
Unit 6, Lesson 1: Basic Human Needs	AF-4					E-2 E-4		
Unit 6, Lesson 2: Infancy--Late Childhood Life Stages	AF-3 AF-4							
Unit 6, Lesson 3: Adolescence--Early Adulthood Life Stages	AF-4							
Unit 6, Lesson 4: Middle--Late Adulthood Life Stages	AF-4							
Unit 6, Lesson 5: Mental Confusion	AF-3 AF-4	C-1 C-2 C-3 C-5						
Unit 6, Lesson 6: Alzheimer's	AF-4							
Unit 6, Lesson 7: Death & Dying	AF-3 AF-4	C-5				E-4 E-2		

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

SCOPE OF UNIT:

This unit covers an overview of course objectives and requirements, effective study habits and test-taking skills, the types of health facilities, the members of the health care team and their functions, the role of the health care assistant relative to the health care team, and ethical and legal responsibilities. Patient rights are included in this unit.

INFORMATION TOPIC: I-1 OR DEMONSTRATION:

HEALTH CARE ASSISTANT
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. List five objectives of this course.
2. Describe rules and regulations as stated in your student handbook.
3. Identify course requirements as determined by your school.
4. Explain survival tips for students.
5. Match personal appearance qualities of a health care assistant with their definitions.
6. Match essential traits and attitudes for the health care assistant with their definitions.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Essential Attitudes for Establishing Working Relationships with Clients
2. HO 2: Promoting Positive Human Relations
3. HO 3: Poem of Compassion
4. HO 4: Grooming
5. Audiovisuals available from the Missouri Vocational Resource Center
    a. *Self-esteem: Know You're Good and Wear it Well*, video #R82, 15 minutes.
    b. *The Most Amazing Computer of All (Attitude)*, video #R80.
    c. *Keys to Increasing Your Self-Confidence*, video #R84, 17 minutes.

6. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *We Know You're There - Message From Some Friends*, video (TF #43), 25 minutes
    b. *What Do You See Nurse?*, video (TF #44), 15 minutes
    c. *Self-esteem and Peak Performance*, audiotape (TT #37), 6 tapes

7. Television and VCR

8. Tape player

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 1 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Schniedman, Rose; Susan Lambert; Barbara R. Wander. *Being a Nursing Assistant*. 5th ed. Bowie, MD: The Robert J. Brady Co., 1989.

Schwartz, Estelle and Lillian Potter. *Foundations of Patient Care*. Philadelphia: J.B. Lippincott, 1981.

Barbara R. Hegner and Esther Caldwall. *Nursing Assistant: A Nursing Process Approach*, 6th ed. Albany, NY: Delmar Publishers, Inc., 1992.

Sorrentino, Sheila A. *Textbook for Nursing Assistants*, 3rd ed. St. Louis, MO: Mosby-Year Book, Inc., 1992.

INTRODUCTION:

In our study of health occupations, we will learn about the different kinds of health care workers and their various skills. We are going to talk about the personal characteristics of health care personnel. We all talk, think, and act in our own particular way, and we all have good qualities. It is especially essential that a health care assistant develop those qualities and attitudes essential to good interpersonal relationships. Health care assistants deal primarily with people; therefore, attitudes and behavior are of particular importance.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

OUTLINE:

I. Objectives of the Course **(II-1)**

   A. Explain the interrelationships and the opportunities for careers in health occupations.

   B. Perform on the job the basic entry-level skills of a health care assistant in one or more of the health occupations.

   C. Describe the technical information needed to make judgments in performing health care assistant duties.

   D. Identify the physical, emotional, and spiritual needs of families and clients.

   E. Meet the physical, emotional, and spiritual need of families and clients on a health service assistant level.

   F. Exhibit behavior which indicates an attitude of respect for clients, coworkers, and fellow citizens.

II. Rules and Regulations of Individual School (use student handbook) **(II-2)**

III. Course Requirements (determined by individual schools) **(II-3)**

   A. Attendance

   B. Overall grade

   C. Classroom strategies

      1. Overview

      2. Use of student guide

      3. Use of references

         a. Textbooks

         b. Periodicals

         c. Pamphlets

      4. Audio-visual materials

5. Evaluation items
6. Assignment/activity sheets
7. Tests
8. Procedures
9. Classroom discussion

IV. Survival Tips for Students **(II-4)**

A. Study habits

1. Surroundings
    a. Quiet
    b. No television or radio
2. Preview material.
    a. Read material quickly.
    b. Use topic headings or key sentences.
    c. Ask yourself what each paragraph contains.
3. Read each paragraph.
    a. Remember to read for content; do not just look at the words.
    b. State paragraph content or ideas in your own words.
    c. Underline important words, sentences, or phrases.
    d. State topic aloud.
4. Test yourself. Construct your own test questions.
5. Time for study
    a. Study as soon as possible after class.
    b. Fill in notes or reorganize notes.
    c. Do assignments as soon as possible after they have been given.
6. Reference materials
    a. Use library frequently.

b. Look up new words in the dictionary or refer to glossary.

7. Taking a test

a. Read the question quickly but thoroughly. Read each word of the question and all choices.

b. Select the answer you believe is correct - usually your first thought is correct.

c. Restate each question in your own words.

d. Never erase or change an answer unless you are positive your first choice is wrong.

V. Personal Appearance of the Health Care Assistant **(II-5)**

A. Hygiene

1. Bathe daily.

2. Use deodorant.

3. Prevent bad breath by brushing teeth.

4. Females, change sanitary pads frequently.

5. Fingernails

a. Short, trimmed

b. Neatly shaped

c. Cleaned

6. Hair

a. Neat and clean

b. Simple style

c. Short, not touching collar (Long hair must be pinned up or tied back so loose hairs do not contaminate.)

d. Keep hair out of face.

e. Beards and mustaches should be neatly trimmed.

7. Foot care - prevent odor/infection

B. Clothing and accessories

1. Uniforms of modest length or pantsuits, cleaned daily and in good repair.

2. Change lingerie and underclothing daily.

3. Undergarments should be worn.

4. Jewelry is not considered a part of any uniform. (Check policy of facility.) **(II-6)**

    a. Wedding ring only

    b. Small, post earrings

    c. Watch with a second hand

5. Stockings should be changed daily.

6. Shoes should be comfortable and provide support.

    a. Clean and polish daily, if shoes are white.

    b. Wash shoestrings as needed.

    c. Color of shoes should be in accordance with facility policy.

7. Make-up

    a. Use in moderation.

    b. Wear no strongly scented after-shave lotion or perfume as it tends to nauseate ill persons.

VI. Personal Health

A. Eat a well-balanced diet. **(II-7)**

B. Acquire adequate sleep and relaxation.

C. Reduce stress (inner pressures) - have some type of leisure activity.

D. Practice good posture.

E. Never use alcohol or drugs before going on duty or while on duty.

F. Prevent disease.

1. Hand washing - before and after care of clients, after going to bathroom, before eating, after eating, before going on duty, and after going off duty

    2. Immunization - as required by facility (Refer to the Infection Control Protocol for Student Clinical Experiences).

    3. Health maintenance program

  G. Exercise

VII. Essential Traits and Attitudes for the Health Care Assistant (HOs 1-4) **(II-8)**

  A. Personality - totality of an individual's behavioral and emotional tendencies

    1. Charm - how to please others

    2. Poise - even tempered, composed

    3. Dignity - pride, self-respect

    4. Attitudes - feelings about people, places, and things

      a. Positive

      b. Negative

    5. Habits - repetition of behavior; acquired

  B. Conduct

    1. Confidentiality - do not disclose client's condition to friends or family

    2. Professional behavior

    3. Gossip

    4. Courtesy - consider others first

  C. Dependability

    1. Report to work on time.

    2. Use facility procedure for absenteeism.

    3. Work habits

    4. Personal habits'

VIII. Summary and Conclusion

  A. Goals and objectives

  B. Rules and regulations

C. Course requirements

D. Survival tips

E. Personal appearance of the health care assistant

F. Personal health

G. Essential traits and attitudes of the health care assistant

This lesson provided an overview of the course, its requirements, and how you can become a vital part of the health care delivery team and make a significant contribution to your life and society. The next lesson is on the health care team.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I : HEALTH CARE DELIVERY SYSTEM

INTERACTION ITEMS:

1. What are the six objectives of this course?
2. How many rules and regulations from your student handbook can you describe?
3. What are the course requirements of this school?
4. What are seven study habit survival tips?
5. What should the personal appearance of a health care assistant be?
6. What three items of jewelry are usually acceptable when wearing a uniform?
7. What are seven personal health habits that the health care assistant should practice?
8. What are three essential traits of a health care assistant?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Role-play situations of appropriate behavior on the job.
2. Examine samples of assignment/activity sheets, procedure sheets, written and performance tests.
3. Outline plan to develop and/or improve study skills.
4. Invite a guest speaker (a cosmetologist) to offer a presentation on grooming.
5. Have class make a list of factors which make up their personalities.

ANSWERS TO EVALUATION ITEMS:

1. See page 3 - objectives of course for answers.
2. Answers will vary for schools.
3. Answers will vary for schools.
4. T
5. F
6. T
7. T
8. T
9. F
10. Daily
11. Collar
12. Never
13. a) Wedding ring
    b) Small, post earrings
    c) Watch with second hand
14. a
15. f

16. d
17. e
18. g
19. c
20. b

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

EVALUATION ITEMS:

1. List six objectives of the course.

   a. ____________________

   b. ____________________

   c. ____________________

   d. ____________________

   e. ____________________

   f. ____________________

2. List three rules and/or regulations from your student handbook.

   a. ____________________

   b. ____________________

   c. ____________________

3. List three course requirements as determined by instructor and/or school.

   a. ____________________

   b. ____________________

   c. ____________________

In the space provided, write "T" if the statement is true, or "F" if it is false.

____ 4. The study environment should be quiet.

____ 5. Soft radio music is okay to listen to while studying.

____ 6. A good study habit is to underline important words, sentences, and phrases.

____ 7. A good time to study is as soon as possible after class.

____ 8. When selecting an answer to a test question, usually your first thought is correct.

____ 9. Never restate the question in your own words, as this will confuse you.

Complete the following short answer questions.

10. The health care assistant should bathe ________________.

11. The health care assistant's hair should not touch the ______________________.

12. ______________ use alcohol or drugs before going on duty or while on duty.

13. Which three pieces of jewelry are usually acceptable to be worn with the uniform?

a.____

b.____

c.____

Match the following traits of a health care assistant in Column II with their correct definitions in Column I.

Column I

____ 14. Ability to please others

____ 15. Even-tempered

____ 16. Uses facility's procedure when absent

____ 17. Pride, self-respect

____ 18. Feelings about people, places, and things

____ 19. Considers others first

____ 20. Does not discuss client's condition with friends

Column II

a. Charm

b. Confidential

c. Courtesy

d. Dependability

e. Dignity

f. Poise

g. Attitude

ESSENTIAL ATTITUDES FOR ESTABLISHING WORKING RELATIONSHIPS WITH CLIENTS

Politeness and Tactfulness

Politeness - a social courtesy

"Please"; "Thank you" - magic words
"May I help you?" with a smile
Allow others to pass - no pushing.
Be gentle in manner and tone.
Always address other employees and clients by surname or title (Mr., Mrs., Miss, Ms. or Dr.).

Tactfulness - skillful thoughtfulness in handling a situation

Think carefully before speaking to avoid offending others. Learn how to answer clients' questions to their satisfaction by referring to the appropriate resource person, etc. (such as, "Why don't we ask your doctor?").

Friendliness

Friendliness is warmth and good will between people and includes courtesy, confidence, and hospitality.

Patience

Patience is the ability to accept the client's behavior in a supportive manner and to convey the feeling that you are in sympathy with him/her, and are interested in his/her welfare.

Truthfulness

Truthfulness is best demonstrated by an earnest and sincere manner. All clients need to trust the people who care for them so that they can learn to rely on people.

Poise

To be composed in difficult situations requires thoughtful control and is not always easy.

Confidence in Ourselves and Others

When we have faith and assurance in ourselves, it tends to inspire the same in others.

Receptiveness

To listen to another person's interests politely, unselfishly, and tactfully is a compliment to that person. Listening can create a pleasant bond between two people.

PROMOTING POSITIVE HUMAN RELATIONS

1. **SPEAK TO PEOPLE.** There is nothing as nice as a cheerful word of greeting.
2. **SMILE AT PEOPLE.** It takes 72 muscles to frown, only 14 to smile.
3. **CALL PEOPLE BY NAME.** The sweetest music to anyone's ears is the sound of his/her own name.
4. **BE FRIENDLY AND HELPFUL.** If you would have friends, be friendly.
5. **BE CORDIAL.** Speak and act as if everything you do is a genuine pleasure.
6. **BE SINCERELY INTERESTED IN PEOPLE.** You can like almost anyone if you try.
7. **BE GENEROUS WITH PRAISE.** Practice caution with criticism.
8. **BE CONSIDERATE OF THE FEELINGS OF OTHERS.** It will be appreciated.
9. **BE THOUGHTFUL OF THE OPINIONS OF OTHERS.** There are usually three sides to a controversy: yours, the other person's, and the right one.
10. **BE ALERT TO GIVE SERVICE.** What counts most in life is what we do for others.

ADD TO THIS A GOOD SENSE OF HUMOR, A BIG DOSE OF PATIENCE, AND A DASH OF HUMILITY AND YOU WILL BE REWARDED MANY TIMES OVER.

POEM OF COMPASSION

(This poem was written by a woman who died in the geriatric ward of Ashludie Hospital near Dunde, England. It was found among her possessions and so impressed the staff that copies were made and distributed to every nurse in the hospital. It is addressed to the nurses who surrounded the woman in her last days. However, because it cries for recognition of common humanity, it could have been written to all of us.)

What do you see, nurse, what do you see?
Are you thinking when you look at me -
A crabbed old woman, not very wise,
Uncertain of habit with far away eyes,
Who dribbles her food and makes no reply
When you say in a loud voice - "I do wish you'd try."
Who seems not to notice the things that you do
And forever is losing a stocking or shoes,
Who resisting or not, lets you do as you will
With bathing and feeding, the long day to fill.
Is that what you're thinking, is that what you see?
Then open your eyes nurse, you're not looking at me.

I'll tell you who I am as I sit here so still.
As I move at your bidding, eat at your will,
I'm a small child of ten with a father and mother,
Brothers and sisters who love one another;
A young girl of sixteen with wings on her feet,
Dreaming that soon a love she'll meet;
A bride at twenty, my heart gives a leap,
Remembering the vows that I promised to keep;
At twenty-five now I have young of my own
Who need me to build a secure, happy home.

A woman of thirty, my young now grow fast,
Bound together with ties that should last.
At forty, my young sons have grown up and gone,
But my man's beside me to see that I don't mourn.
At fifty once more babies play round my knee -
Again we know children, my loved one and me.
Dark days are upon me, my husband is dead,
I look at the future, I shudder with dread.
For my young are all rearing young of their own,
And I think of the years and the love that I've known.

I'm an old woman now and nature is cruel.
'Tis her jest to make old age look like a fool.
The body it crumbles, grace and vigor depart.
There is a stone where I once had a heart.
But inside this old carcass a young girl still dwells,

And now again my bittered heart swells.
I remember the joys, I remember the pain
And I'm loving and living life over again.
I think of the years, all too few, gone too fast,
And accept the stark fact that nothing can last.
So open your eyes, nurse, open and see
Not a crabbed old woman.
Look closer - SEE ME!

GROOMING

Keeping Your Hair Clean and Neatly Groomed

Your hair must be clean and neat if you want to make a good impression.

1. At work, you need a haircut that won't attract negative attention or get in your way. Don't choose a style that covers your eyes.
    a. Get advice from a beautician or barber on the best cut for you.
    b. Choose a haircut that fits your lifestyle. If you don't like to spend time on your hair, you want a style that only needs to be washed and combed out.
2. Wash your hair at least two to three times a week.
    a. If you have oily hair, or if you work in a dirty place, you will need to wash your hair more often.
    b. You must use shampoo or soap. You may want to use other hair products too (hair conditioner, hair spray) if you think they make your hair look better.
3. Comb your hair often. Combing keeps your hair healthy, gets rid of tangles, and shapes your hair after you shower or bathe.
    a. Only comb your hair in a bedroom or bathroom. Don't comb it in a public place (a lunchroom or classroom).
4. Before you grow a beard or mustache, find out if your company has a policy on facial hair. See if anyone else at work has a beard or mustache. If you decide to grow a beard or mustache, it must be even and well-groomed.
5. You must shave, even if you choose to wear facial hair.
    a. Don't use a razor or blade that scrapes or chafes your skin. (Dull blades can scrape you.)
    b. Don't shave so often or so closely that you scrape or chafe your skin.

Maintaining a Clean and Well-Groomed Body

To make a good impression on the job, your body must be clean, well-groomed and free of strong or offensive odors.

1. Take a bath or shower every day. Make sure you use soap so you remove excess oils from your skin.

2. Use a deodorant or antiperspirant every day. A deodorant masks the smell of sweat. An antiperspirant tries to stop sweat from forming as well as masking its odor.

   Deodorant may be enough for you. But if your clothes often get wet with sweat, you need an antiperspirant.

3. Keep your hands and feet clean.

   a. Wash your toes and the bottoms of your feet each day. Since feet perspire and are covered by shoes and socks (or hose), the feet get infected easily.

   b. Wear clean socks or hose each day and a different pair of shoes every other day.

   c. Keep your fingernails clean and neat.

   d. Keep your fingernails about fingertip length. Fingernails that are too long can get in the way, and nails that are too short can get infected.

   e. Wash your hands often during the day. Dirty hands pass germs.

4. Keep your mouth clean and in good repair.

   a. Brush your teeth at least twice a day. Gently scrub all surfaces in your mouth (including your tongue) with a soft-bristled toothbrush.

   b. Use dental floss to reach places a toothbrush cannot.

   c. Using mouthwash is O.K., but it should not replace brushing.

   d. Visit the dentist at least once or twice a year. The dentist (or his/her staff) cleans your teeth and checks your mouth for damage or disease.

Using Cosmetics and Toiletries Properly

1. To learn what is appropriate, find out what others are using at work.

   In general, it is better to wear too little makeup than too much. If you don't know how to use makeup, get good advice. You can get help from books, fashion magazines or cosmetic counters in stores.

2. Be careful when using perfume, cologne, or after-shave.

   a. Don't wear a scent that is too strong. A scent should not send people running for cover.

   b. Don't buy perfumes or colognes you cannot afford. There are many good products sold that don't cost too much.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

SCOPE OF UNIT:

This unit covers an overview of course objectives and requirements, effective study habits and test-taking skills, the types of health facilities, the members of the health care team and their functions, the role of the health care assistant relative to the health care team, and ethical and legal responsibilities. Patient rights are included in this unit.

INFORMATION TOPIC: I-2 OR DEMONSTRATION:

HEALTH CARE TEAM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms presented in this lesson to correct definitions.
2. Match selected health care team members with their major responsibilities.
3. Describe the lines of authority the health care assistant should follow.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: The Health Care Team - Acute Care Facility
2. HO 2: The Health Care Team - Long-Term Care Facility
3. HO 3: Omnibus Budget Reconciliation Act (OBRA)
4. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *Building Bridges: Ways to Improve the Quality of Long Term Nursing Care*, video (TF #179), 20 min.
    b. *Seven Days a Week*, video (TF #81), 30 min.
5. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 2 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 2.

Medication Technician. Revised ed. University of Missouri-Columbia: Instructional Materials Laboratory, 1986.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 1.

Hegner, Barbara R; Ester Caldwell. *Nursing Assistant: A Nursing Process Approach*, 6th ed. Albany, NY: Delmar Publishers, 1992.

INTRODUCTION:

The term "health care team" is another way of describing the process by which people join together to diagnose, plan for, give care to, and rehabilitate those individuals with illnesses, injuries, or infirmities of old age who require health care. The concept of the health care team is based on the fact that it takes more than one or several individuals to provide effective care. In this lesson, you will learn about the individuals on the health care team and their specific responsibilities.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

OUTLINE:

I. Terms and Definitions **(II-1)**

  A. Activities of daily living - any activity that is performed in one's life on a daily basis

  B. Acute care facility - hospitals and clinics for immediate, short-term care

  C. Certified bed - beds in a skilled or intermediate care facility that are licensed for Medicaid clients

  D. Client - someone who pays a professional for services; can be a patient or resident

  E. Diagnosis - determining what kind of disease or medical condition a person has; the health care assistant can find out by looking in the chart; the doctor determines the problem based on tests, observations, etc.

  F. Elimination - to rid the body of wastes, such as urine or stool

  G. Emotion - one's feelings

  H. Health care facility - any facility designed for individuals requiring health care

  I. Home health agency - agency that provides extended care in the home

  J. Hospice - care of persons during a terminal illness; either in the home or a health care facility

  K. Hospital - a facility which provides care for clients of all ages with varied health problems

  L. Intermediate care facility - facility with a director that is an RN or LPN; if the director is an LPN, the facility must have an RN consultant a minimum of four hours per week; if a level II facility, an LPN or RN must also be on the day shift; LPN or RN must be on call 24 hours per day

  M. Licensed bed - beds for private pay individuals in licensed facilities

  N. Licensed facility - a facility that has met the requirements of the Division of Aging for licensure

O. Long-term care facility - facility designed for care of clients for an extended period of time

P. Medicaid - a program funded by the federal and state governments for individuals whose income are below a certain level; it pays for medical costs

Q. Medicare - a federal program that assists with medical costs for individuals over the age of 65

R. Mobility - ability to move

S. Patient - this term is usually used when referring to individuals receiving health care in an acute care facility

T. Physical - relating to the body and the functioning of the body

U. Psychological - associated with the thought processes of the brain

V. Reality orientation - techniques used to assist a person to become aware of the world in which he/she lives

W. Rehabilitation - restoring of an ill or injured client so he/she would be able to help himself/herself

X. Resident - this term is usually used when referring to individuals receiving health care in a long-term care facility

Y. Residential care facility - a facility that provides twenty-four hour care to three or more non-related clients; may provide board, personal care, supervision of health care, and distribution of medications

Z. Residential care facility I - provides shelter and board and may include storage and distribution of medications

AA. Residential care facility II - provides shelter and board; includes storage and distribution of medications, supervision of diet, and assistance with personal care; may include care during short-term illness and recuperation

BB. Responsible party - a family member/friend of the client who has been designated in writing by the client to handle matters and receive reports related to the client's general condition

CC. Restorative - returning a client to health or consciousness

DD. Skilled nursing facility - facility that has a licensed nurse on duty to provide or supervise care of clients in long-term care as prescribed by the physician; director of nursing is an RN; an RN is on duty during day shift; an LPN or RN is on duty evening or night shift; an RN must be on call when an LPN is on duty

EE. Social - relating to human society, getting along with others

FF. Social services designee - social services representative who is appointed by the resident in writing to take certain responsibilities and receive reports related to a resident's personal possessions and property

II. Health Care Team Members (HOs 1 & 2) **(II-2)**

A. Client and his/her family have particular needs which must be identified by team members.

B. Physician

1. Makes a diagnosis

2. Gives orders for medication and treatment

3. Guides plan of care

C. Administrator - responsible for all aspects of operation of the long-term care facility including delivery of proper client care

D. Nursing staff

1. Registered nurse (RN)

a. Length of training can be a two-, three- or four-year program.

b. Must pass a licensure examination administered by the State Board of Nursing upon completion of educational program

c. Duties

1) Plans, assigns, and evaluates nursing care

2) Responsible for all team members working together

3) Reviews quality of care

4) Gives medication

5) Starts IVs

6) Assists with client care (physical, psychological, and social)

7) Takes and records physician's telephone and verbal orders

8) Teaches nursing procedures

9) Administers tube feedings

2. Licensed practical nurse (LPN)
   - a. Length of training is one year.
   - b. Must pass a licensure examination administered by State Board of Nursing upon completion of education program
   - c. Duties
     - 1) Plans, assigns, and evaluates nursing care
     - 2) Gives medication
     - 3) Starts IVs after successful completion of IV therapy course
     - 4) Assists with client care (physical, psychological, and social)
     - 5) Takes and records physician's telephone and verbal orders
     - 6) Performs most treatments
     - 7) Administers tube feedings

3. Certified medication technician (CMT)
   - a. Must have successfully completed the required course for Nurse Assistant in a Long-term Care Facility and/or meet other requirements before starting training for CMT
   - b. Must be a high school graduate or have a GED.
   - c. Must pass final practicum examination before being certified
   - d. Duties
     - 1) Prepares and administers selected medications
     - 2) Transcribes physician's orders
     - 3) Observes and reports effects of medications
     - 4) Assists with client care
     - 5) May administer insulin after successful completion of an Insulin Administration course

4. Certified nurse assistant (CNA) (HO 3)
   - a. Length of training is a minimum of 75 hours of classroom and 100 hours of on-the-job training and competency evaluation (HO 3)

b. Must pass final examination before qualified

c. Duties

- 1) Provides for and assists with activities of daily living
- 2) Provides bedside care which includes selected procedures under the supervision of the charge nurse
  - a) Feeding
  - b) Dressing
  - c) Bathing
  - d) Checking and recording vital signs
  - e) Weighing and measuring client
  - f) Bowel and bladder retraining
  - g) Reality orientation and other forms of communication with the client
  - h) Maintaining safe environment for clients and other staff
  - i) Transferring and positioning
  - j) Transporting client to activities planned by the activities director
- 3) Makes accurate observations and reports to charge nurse
- 4) Helps meet the emotional needs of the client
  - a) Aware of client's emotional needs; alerts social services designee of problem through chain of command
  - b) Is an effective communicator

E. Dietary employees

1. Dietitian

a. May act as a consultant to dietary/food service supervisor

b. Approves menus, evaluates, and counsels clients with nutritional problems

2. Dietary/food service supervisor
    a. Manages dietary department (orders supplies, foods, etc.)
    b. Interviews clients
    c. Supervises dietary employees
3. Dietary staff
    a. Prepares and serves food
    b. Washes dishes
    c. Keeps dietary area clean

F. General housekeeping and maintenance
    1. Housekeeping employees
        a. Provide daily room care
        b. Responsible for cleaning all other areas of facility
    2. Laundry employees
        a. Laundry of linen, bedding, and clothing
        b. Repair linens, bedding, and clothing
    3. Maintenance employees - general repair and grounds keeping

G. Activities director
    1. Conducts group and individualized activities so that each client of the facility is reached
    2. Supervises volunteers
    3. Schedules community sponsored activities in the facility

H. Rehabilitation specialists
    1. Physical therapist
        a. Plans and provides therapy essential to promote rehabilitation based on physician's orders
        b. Instructs staff in restorative nursing procedures
        c. Education - bachelor's or master's degree from an accredited school

2. Physical therapist assistant

    a. Assists the physical therapist in evaluating clients, setting up treatment programs, carrying out treatment programs and keeping notes on clients

    b. Education - graduate of a two-year associate degree program accredited by the American Physical Therapy Association

3. Occupational therapist

    a. Restore, maintain, or improve daily living skills such as eating, grooming, hygiene, toileting, and dressing

    b. Education - bachelor's or master's degree from a school accredited by the American Occupational Therapy Association

4. Speech-language therapist

    a. Identify, assess, and rehabilitate persons with speech or language disorders such as articulation problems or language problems

    b. Education - bachelor's or master's degree from a school accredited by the American Speech-Language Hearing Association

I. Social services (designee)

1. Screens clients prior to admission to a facility to determine if the facility can meet the client's needs

2. During residency

    a. Assists with admission process - reviews rights and responsibilities of client and facility

    b. Counseling

        1) Has daily contact with client to determine if social and emotional needs are being met

        2) If qualified, provides individual or family counseling--otherwise refers individual to qualified professional for assistance

    c. Personal services

        1) Financial resources - assists with insurance forms, pensions, social security, etc.

        2) Secures aids to daily living (wheelchairs, canes, etc.)

        3) Makes arrangements for outside services to meet client's needs

        3. Discharge planning

            a. Referrals (home health, another long-term health care facility, hospital)

            b. Follow-up

    J. Diagnostic careers

        1. X-ray

        2. Nuclear medicine

        3. Research

        4. Laboratories

    K. Fiscal services

        1. Admitting clerk

        2. Accounting - business office

    L. Administrative services

        1. Personnel or human resources

        2. Public relations

        3. Purchasing

III. Chain of Command - Line of Authority **(II-3)**

    A. If the health care assistant observes or suspects a problem, he/she should direct this concern to the next responsible person (immediate supervisor) and then follow each successively higher level along the chain of command until the problem is resolved.

    B. Charge nurse (RN or LPN) is next in command.

    C. Director of nursing is next.

    D. Administrator is the health care team member with the most responsibility and ultimate authority.

IV. Summary and Conclusion

    A. Terms and definitions

    B. Health care team members

C. Chain of command - line of authority

The most important member of the health care team is the client and his/her family. All team members must join together to identify and meet each client's needs. They must communicate well with one another to give the best care possible. As a health care assistant, you must be aware of the lines of authority you are required to follow when a problem arises. The next lesson is on ethical and legal responsibilities.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I : HEALTH CARE DELIVERY SYSTEM

INTERACTION ITEMS:

1. What is the definition of each of the terms: diagnosis, mobility, elimination, reality orientation, rehabilitation, restorative, designee, physical, psychological, social, emotion, responsible part, and activities of daily living?
2. What are the major responsibilities of the following health care team members: physician, dietary staff, RN, LPN, administrator, social service designee, health care assistant, activities director, physical therapist, and occupational therapist?
3. What chain of command or line of authority should health care assistants follow when reporting a potential problem?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Divide class into two groups. Assign titles of health care team members to each group. Have students prepare clues that will identify who the team member is. The other team then guesses who the member is based on the clues.
2. Have students role-play different levels of authority.
   a. Remind a staff member to do his/her job.
   b. Reprimand someone for consistently being late.
   c. Deal with a staff member who has not followed the chain of command while trying to solve a problem.
3. Review the facility's job description for health care assistants.
4. Show videos.

ANSWERS TO EVALUATION ITEMS:

1. f
2. j
3. i
4. k
5. h
6. l
7. a
8. e

9. g
10. d
11. b
12. c
13. b
14. d
15. b
16. e
17. a
18. d
19. g
20. c
21. f

22. The student should indicate in his/her response that the person to report the incident to would be the director of nursing. If the director of nursing is not available, the next person to inform would be the administrator.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I : HEALTH CARE DELIVERY SYSTEM

EVALUATION ITEMS:

Match the following terms in Column I with the correct definitions in Column II.

Column I

___ 1. Diagnosis

___ 2. Mobility

___ 3. Elimination

___ 4. Reality orientation

___ 5. Rehabilitation

___ 6. Restorative

___ 7. Physical

___ 8. Psychological

___ 9. Social

___ 10. Emotion

___ 11. Responsible party

___ 12. Activities of daily living

Column II

a. Relating to the body and the functioning of the body

b. A family member/friend of the client who has been designated in writing by the client to handle matters and receive reports related to the client's general condition

c. Any activity that is performed in one's life on a daily basis

d. One's feelings

e. Associated with the thought processes of the brain

f. Finding out what kind of disease or medical condition a person has

g. Relating to a human society, getting along with others

h. Restoring of an ill or injured client so he/she would be able to help himself/herself

i. To rid the body of wastes, such as urine or stool

j. Ability to move

k. Techniques used to assist a person to become aware of the world in which he/she lives

l. Returning a client to health or consciousness

13. Which one of the following best describes the responsibility of the health care assistant? (Circle the letter of the best answer.)

   a. Plans and assigns nursing care
   b. Provides client bedside care under the supervision of a nurse
   c. Assumes responsibility for all team members
   d. Administers medications

14. A CMT has asked you to give some of her morning medications on several occasions. Who would you talk to about this? (Circle the letter of the best answer.)

   a. Another health care assistant
   b. The administrator
   c. The physician
   d. The charge nurse

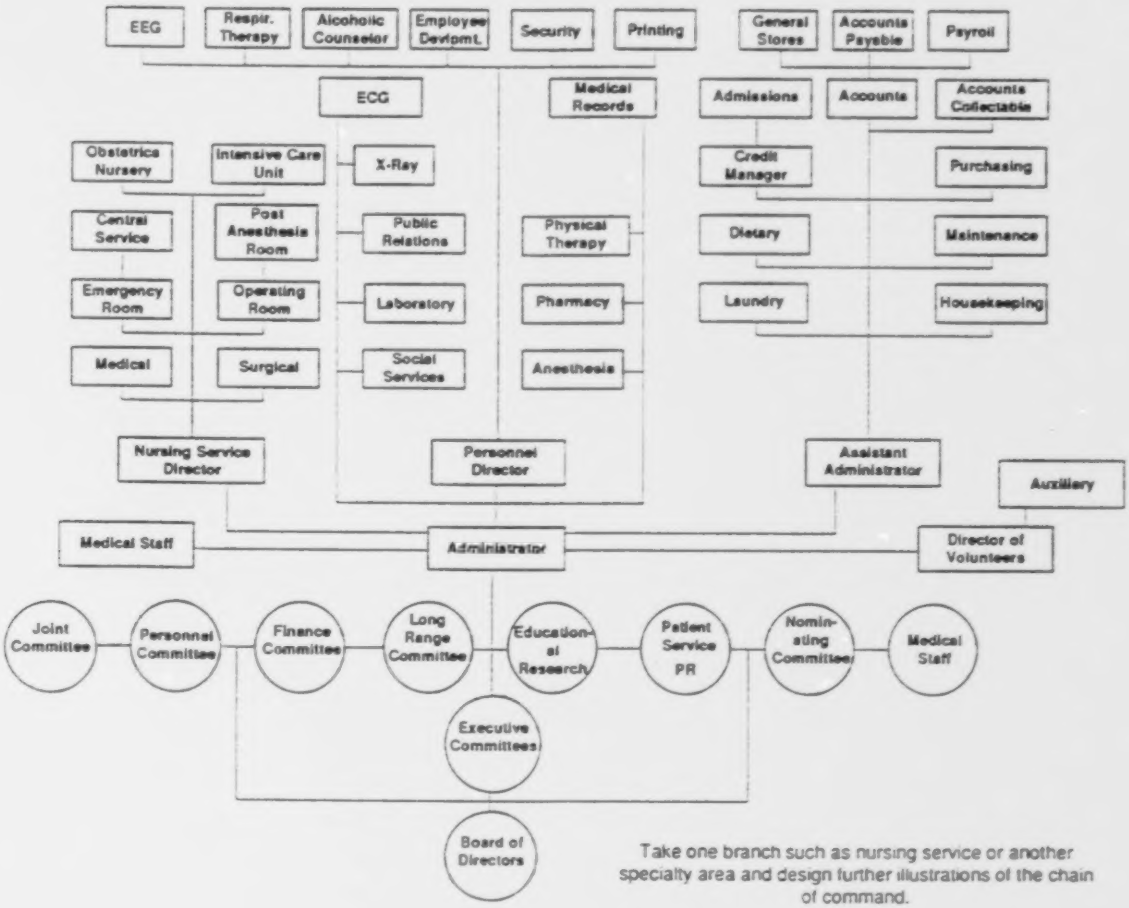
Match the following health care team members in Column I with one responsibility in Column II associated with their job titles.

Column I	**Column II**
___ 15. Physician	a. Plans, assigns, and evaluates nursing care
___ 16. Dietary staff	b. Writes orders for medications and treatments
___ 17. Nurse (RN/LPN)	c. Provides bedside care
___ 18. Administrator	d. In charge of the facility
___ 19. Social service designee	e. Prepares and serves food
	f. Plans social events for the facility
___ 20. Nurse assistant	
___ 21. Activities director	g. Helps client with admission, discharge, and personal affairs

22. You find the charge nurse smoking in one of the client's rooms. Who will you report this to? If that person is not available, who would be the next person to inform of the problem?

THE HEALTH CARE TEAM - ACUTE CARE FACILITY

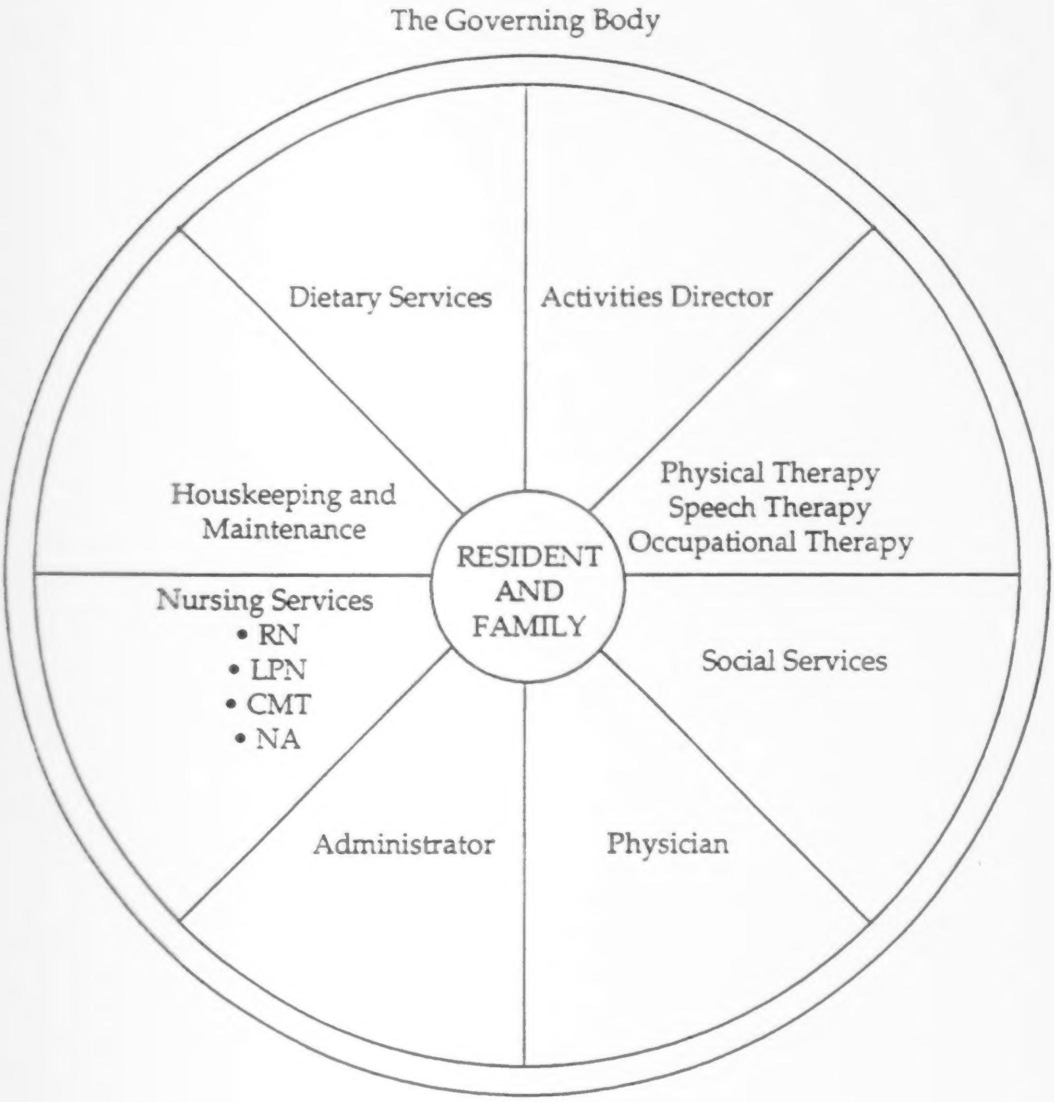
Organizational Chart


EEG
Respir. Therapy
Alcoholic Counselor
Employee Devlpmt.
Security
Printing
General Stores
Accounts Payable
Payroll
ECG
Medical Records
Admissions
Accounts
Accounts Collectable
Obstetrics Nursery
Intensive Care Unit
X-Ray
Credit Manager
Purchasing
Central Service
Post Anesthesia Room
Public Relations
Physical Therapy
Dietary
Maintenance
Emergency Room
Operating Room
Laboratory
Pharmacy
Laundry
Housekeeping
Medical
Surgical
Social Services
Anesthesia
Nursing Service Director
Personnel Director
Assistant Administrator
Auxiliary
Medical Staff
Administrator
Director of Volunteers
Joint Committee
Personnel Committee
Finance Committee
Long Range Committee
Education-al Research
Patient Service PR
Nomin-ating Committee
Medical Staff
Executive Committees
Board of Directors

Take one branch such as nursing service or another specialty area and design further illustrations of the chain of command.

BEST COPY AVAILABLE

THE HEALTH CARE TEAM - LONG-TERM CARE FACILITY


The Governing Body
Dietary Services
Activities Director
Houskeeping and Maintenance
Physical Therapy
Speech Therapy
Occupational Therapy
RESIDENT AND FAMILY
Nursing Services
• RN
• LPN
• CMT
• NA
Social Services
Administrator
Physician

OMNIBUS BUDGET RECONCILIATION ACT (OBRA)

Federal regulations require that all states identify the basic education, level of competencies required for certification, and the duties and responsibilities of nursing assistants in long-term care facilities.

This law is called the Omnibus Budget Reconciliation Act (OBRA).

OBRA consists of regulations from the Department of Health and Human Services Care Financing Administration. The regulations establish, on the national level, the minimum requirements for nurse aide training and competency programs.

In 1987 a federal law was passed that regulates the education and certification of nursing assistants. This federal law became effective October 1, 1990. The following are required by the law.

A. Nurse assistants must complete a competency evaluation or a state approved course.

B. Nurse assistants must complete a minimum of 75 hours of theory and practice. (NOTE: Missouri requires 75 hours of theory and 100 hours of clinical practice.)

C. All nurse assistants working prior to 1989, must have completed a competency evaluation program by October 1, 1990.

D. Nurse assistant students may take the certification exam three (3) times. If they do not successfully pass the exam the third time, the entire course must be repeated.

E. A nurse assistant who has not worked for 24 months must complete a new training and competency program.

F. Continuing education is required. The number of hours varies with individual states.

G. The curriculum must include

   1. Resident rights
   2. Safety and emergency care
   3. Personal care skills
   4. Basic nursing skills
   5. Basic restorative services
   6. Mental health and social service needs

A nurse assistant must know the regulations and any legislation of the state in which they are employed. Remember, these are minimum federal requirements. A state may require more theory and clinical hours than is required by OBRA.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I : HEALTH CARE DELIVERY SYSTEM

SCOPE OF UNIT:

This unit covers an overview of course objectives and requirements, effective study habits and test-taking skills, the types of health facilities, the members of the health care team and their functions, the role of the health care assistant relative to the health care team, and ethical and legal responsibilities. Patient rights are included in this unit.

INFORMATION TOPIC: I-3 OR DEMONSTRATION:

ETHICAL AND LEGAL RESPONSIBILITIES
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms presented in this lesson to correct definitions.
2. Identify techniques of proper documentation.
3. Identify, respect, and apply rights of patients, residents, and clients.
4. Identify who should be notified if abuse, neglect, or exploitation is suspected.
5. List five areas of information needed when reporting an abuse, neglect, or exploitation case.
6. Explain the term grievance.
7. Describe the legal responsibilities of a health care assistant.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Resident's Rights - State of Missouri
2. HO 2: Resident's Rights - Federal
3. HO 3: Patient's Rights - Proposed by Bureau of Hospital Licensing and Certification
4. HO 4: Patient's Rights - Department of Mental Health Statues
5. HO 5: Patient's Rights - Department of Health - Home Health Licensing

6. HO 6: Patient Self-Determination Act

7. HO 7: Abuse and Neglect Reporting

8. HO 8: Ethical and Legal Responsibilities - Activity Sheet

9. Audiovisuals available from the Missouri Division of Aging Film Library

   a. *The Last Right*, video (TF #75), 28 min.
   b. *Criminal Justice Investigation*, video (TF #54), 40 min.
   c. *Ethics Committees: Allies in Long-Term Care*, video (TF #187), 33 min.
   d. *Pointers on Recording and Preparing for Court*, video (TF #53), 90 min.
   e. *The Detour*, video (TF #11), 16 min.
   f. *Elvira's Plight*, video (TF #15), 10 min.
   g. *Ethics and Gerontological Nurse Research*, video (TF #58), 90 min.
   h. *Elder Abuse: Five Case Studies*, video (TF #186), 43 min.
   i. *Elderly Abuse and Neglect in the Family/The Hidden Sorrow: An Overview*, video (TF #71A), 24 min.
   j. *Elderly Abuse and Neglect in the Family/in Pursuit of a Life without Violence*, video (TF #71B), 26 min.

10. Audiovisuals available from the Missouri Vocational Resource Center

    a. *Well Shut My Mouth* (Confidentiality), video #4, 12 min.
    b. *Residents Rights: The Art of Caring*, video #18, 20 min.

11. Projector

12. Television and VCR

13 Facility's Policy Manual - "Grievance Procedure" section

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 3 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 7.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 3.

Medication Technician. Revised edition. University of Missouri-Columbia: Instructional Materials Laboratory, 1986.

State of Missouri. *Long-Term Care Facility Regulations and Licensure Law for Residential Care Facilities I and II, Intermediate Care Facilities, and Skilled Nursing Facilities*. Department of Social Services, Division of Aging, 1991. (Current manual should be used.)

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 1, Section 3.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 1.

INTRODUCTION:

Terms, definitions, proper documentation, and legal responsibilities pertain to all clients in health care facilities.

As an employee in the health care occupations, it is important for you to be aware of your legal and ethical responsibilities to prevent any medical or legal problems from developing. When functioning as a health care assistant, you are responsible and accountable for your own actions. There is a possibility that you may be sued and taken to court by a client and/or his/her family if you do not perform your job in a safe and proper manner. Therefore, you must be aware of state laws, rules, and certain legal terms and what they mean.

Legal relates to the law and ethical relates to a set of moral principles and values. When you serve clients in any way or have access to their records, you are expected to maintain their confidence and trust. Any violation of the client's confidence may be defined as an illegal or immoral act.

There are certain laws which protect clients while in a health care facility. The client voluntarily signs an admission agreement giving his/her consent for treatment and care, but the client has the right to refuse treatment unless he/she has been determined legally incapacitated.

The problems of abuse, neglect, and exploitation were also addressed in the Omnibus Nursing Home Act of 1979 and Omnibus Reconciliation Act (OBRA) of 1987. Resident's rights pertain to individuals in long-term care. We will be discussing what these terms mean, as well as what to do if you believe a resident's rights are being violated in such a way.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

OUTLINE:

I. Terms and Definitions **(II-1)**

A. Abandonment - leaving client unattended

Example: Leaving in the middle of a shift

B. Abuse - the infliction of physical, sexual, or emotional injury or harm

Example: Slapping a client

C. Assault - threat or attempt to injure another in an unlawful manner

Example: Telling a client, "If you don't be quiet, I'll tie your hands down."

D. Battery - unlawful application of force to the person of another

Example: Carrying out the above threat

E. Conduct - one's actions in general; behavior

F. Confidentiality - containing secret information; revealing the information could be harmful

G. Consent - permission granted voluntarily by a person in his/her (sound/clear) mind

H. Ethical - relating to a set of moral principles and values

I. Ethics - the discipline dealing with that which is good and bad and that which is moral duty and obligation

J. Exploitation - illegal or improper use of a person's property or resources to the degree that substantial risk of harm exists

Example: Not giving care without gifts or tips

K. False imprisonment - unjustified detention of a person

Example: Applying restraints to a client who is not mentally impaired and who does not have a legal guardian

L. Invasion of privacy - a civil wrong that unlawfully makes public knowledge of any private or personal information without the consent of the wronged person

Example: Discussing with a friend the care of a client which involves personal information, without the permission of the client

M. Legal - relating to the law

N. Libel - a false and malicious publication in writing about an individual or group to a third party

O. Malpractice - improper or negligent treatment of a client resulting in damage or injury

Example: Observing daily that a wound is becoming infected and not reporting it to the charge nurse

P. Morals - your own personal values

Q. Neglect - failure of person(s) responsible for an individual to provide necessary services to maintain the physical and mental health of the individual, when such failure presents an imminent or probable danger to the individual

R. Negligence - failure to perform in a reasonably prudent manner or by acceptable health care practices

Example: Leaving bedside rails down on a bed occupied by a confused client, which results in the client falling out of bed

S. Perpetrator - person who inflicts harm

T. Privileged communication - any personal or private information which is relevant to a client's care, given by the client to medical personnel

U. Slander - to make any oral defamatory false remark about another, spoken words that tend to damage the reputation of another

Example: Stating that a client is a "crazy old woman and out of control" to a friend of yours who knows the client

V. Value system - behavior related to a pattern of conduct or ideas that are accepted as worthwhile or meaningful

II. Techniques of Proper Documentation **(II - 2)**

A. The chart is a legal document accepted in a court of law.

1. Use ball-point ink pen, the chart is a permanent record.

2. Spell correctly.

        3. Cross out errors, never erase.

        4. Chart only what happens (being objective), do not write your own opinion.

    B. Follow the proper charting form.

III. Patient/Resident/Client Rights (HOs 1, 2, 3, 4, & 5)

    A. The patient/resident/client has rights just as you do. **(II-3)**

INSTRUCTOR NOTE: Discuss Handouts 1, 2, 3, 4, 5, 6, and 7 in class, reviewing each of the rights listed. Discuss the Patient Self-Determination Act, Handout 6.

    B. The common rights of all patients/residents/clients are:

        1. The right to be free from abuse or neglect

        2. The right to be treated with respect

        3. The right to be informed

        4. The right to consent or refuse treatment

        5. The right of confidentiality

        6. The right to participate in the planning of care

    C. The American Hospital Association has a "Patient's Bill of Rights" that is recognized and honored by many health care facilities.

        1. Considerate and respectful care

        2. Obtain complete current information concerning his/her diagnosis, treatment, and prognosis (expected outcome)

        3. Receive information necessary to give his/her informed consent prior to the start of any procedure or treatment

        4. Refuse treatment to the extent permitted under law

        5. Privacy concerning his or her medical-care program

        6. Confidential treatment of all records

        7. Reasonable response to his/her request for services

        8. Examine his or her bill and receive an explanation of all charges

        9. Be informed of any hospital rules or regulations

D. Each facility should have a section in the policy and procedure manual that explains how each patient/resident/client rights are to be implemented and ensured.

1. Licensed facilities are required to have Rights statements by the credentialling agency. (HOs 1, 2, 3, 4, 5, & 6)

2. The standards are established by state and federal statutes. (HOs 1 & 2)

3. Legislation continues to provide for patient/resident/client rights. (HOs 1, 2, 3, 4, 5, & 6)

IV. Abuse, Neglect, and Exploitation Reporting - If you suspect abuse, neglect, or exploitation, notify the following agencies' hot line telephone number (HO 7): **(II-4)**

The Division of Family Services	1-800-392-3738
The Division of Aging	1-800-392-0210
The Department of Health, Bureau of Hospital Licensing & Certification	1-573-751-6400
Department of Mental Health	1-800-364-9687
Department of Health, Bureau of Home Health Agency Licensing	1-573-751-6400

A. Abuse, neglect, or exploitation may be perpetrated by:

1. Staff members - CNA, CMT, RN, LPN, Doctors, dietary, or maintenance personnel, or any person that has contact with the client.

2. Family members

3. Visitors

4. Other clients

B. Signs of physical abuse

1. Bruises on both upper arms

2. Bruises resembling an object

3. Bruises on trunk from repeated striking

4. Burns in unusual locations

5. Cuts/welts/black eye

6. Broken eyeglasses - lens or frames

7. Anything that appears suspicious should be reported.

C. Behavioral signs of emotional abuse

1. Sudden change in behavior

2. Withdrawal that is a change from the usual behavior

3. Lack of complaints

D. Physical signs that might indicate neglect (HO 7)

1. Unkempt appearance

2. Untrimmed nails

3. Signs of dehydration

4. Weight loss

5. Pressure ulcers

E. Exploitation - to protect the client, laws exist that prohibit the acceptance or solicitation of money or any item having monetary value from the client. This includes:

1. Staff of the facility or agency

2. Volunteers at the facility

3. Other clients

F. Any person who knowingly abuses or neglects a client of a facility could be charged with a Class D felony. If convicted, the person could serve two to five years in a Missouri State Penitentiary or one year in county jail, be fined up to $5,000 for each offense, or be fined and serve the time.

G. The Division of Aging shall maintain a record of the names of any persons who have been determined to have knowingly abused or neglected a client while employed in any facility.

H. No licensed operator of a facility shall knowingly employ any person who has been determined to have knowingly abused or neglected a client whose name is listed in the records.

V. Information Needed When Reporting an Abuse, Neglect, or Exploitation Case **(II-5)**

A. Name and address of client

B. Name and address of the facility

C. Nature and extent of victim's condition or nature of abuse or neglect

D. Name of person making report or complaint (will be held confidential)

E. Name of alleged perpetrator (person who inflicted the harm) if known

VI. Grievance Procedure **(II-6)**

A. Grievance - a cause of distress which justifies complaint or resistance

B. May be filed by a client or employee

C. Grievance procedure for each facility should be outlined in writing and appear in that facility's policy manual; please refer to it.

VII. Legal Responsibilities of a Health Care Assistant - The health care assistant can prevent legal and ethical problems from developing while caring for clients by remembering the following rules. (HO 8) **(II-7)**

A. Remember, the client is your responsibility while you are in charge of his/her care. Do not abandon your job.

B. Be aware of the resident's rights and avoid violating them.

C. Prepare all paperwork correctly.

D. Know the lines of authority--do only those things which you have been trained and supervised to do.

E. Do not give personal information about a client over the telephone--refer all calls to the nurse.

F. Do not discuss with others not involved in the client's care (either in the facility or outside) a client's behavior, medical condition, or his/her personal matters (if calling the Division of Aging hot line 1-800-392-0210, you may discuss a client's behavior and medical condition).

VIII. Summary and Conclusion

A. Terms and definitions

B. Techniques of proper documentation

C. Patient/resident/client rights

D. Abuse, neglect, and exploitation reporting

E. Information needed when reporting an abuse, neglect, or exploitation case

F. Grievance procedure

G. Legal responsibilities of a health care assistant

In this lesson, we have discussed ethical and legal terms and residents' rights. It is the health care assistant's responsibility to report any evidence of abuse, neglect, and exploitation. The next unit is on communication and observation skills.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

INTERACTION ITEMS:

1. What is the definition of the following terms: conduct, battery, false imprisonment, slander, negligence, assault, libel, ethics, exploitation, abuse, and neglect?
2. What are four techniques of proper documentation?
3. How many client's rights can you describe?
4. Who do you notify if you suspect abuse, neglect, or exploitation?
5. What five areas of information are needed when reporting an abuse, neglect, or exploitation case?
6. How is the term grievance defined?
7. What are the legal responsibilities of the health care assistant?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Role-play some situations that involve legal/ethical conduct:
    a. You have just witnessed a coworker slapping a client who is resisting her efforts to get him to bed.
    b. One of your clients in long-term care is making repeated attempts to go out-of-doors. In order to keep him safe while you give care to another, you tie him to a chair.
2. Role-play some situations that involve resident's rights:
    a. A visitor has just given a client a $20 bill. You know this confused person cannot manage it safely.
    b. A husband is visiting his wife who is a client. The door to the room is closed, and you need to deliver fresh water.
    c. You are a client who receives personal mail that has been opened.
3. Have student groups complete Activity Sheet.
4. Show slide and/or video presentations.

ANSWERS TO ETHICAL AND LEGAL RESPONSIBILITIES - ACTIVITY SHEET (HO 8)

1. a. You can tell nothing to Aunt Mattie about Sara's behavior.
   b. Sara's client right of confidentiality prevents you from providing any information to Aunt Mattie without Sara's permission.
   c. Suggest that Aunt Mattie contact Sara's therapist to discuss her progress.

2. a. You cannot get this information to your friend.
   b. The information you have learned is confidential and you cannot tell anyone. You could share the information with Billy's therapist.
   c. Even though you are not responsible for Team I, you have gained information about a client in the institution. You must protect Billy's right of confidentiality.

3. a. Arlene has the right to refuse any experimentation regarding her care. She has the right to considerate and respectful care. Arlene has the right to refuse treatment to the extent permitted by law.
   b. Inform your immediate supervisor of Jennifer's threats and remarks regarding Arlene's intelligence. You or your supervisor should inform Arlene's psychiatrist that she is not taking the medication. A record should indicate that she does not intend to take the experimental drug.

4. a. One possible cause may be that Mr. Gower is being physically abused.
   b. If Mr. Gower's condition is due to physical abuse, he might refuse to say what happened to him because he is afraid that the person who is abusing him will get mad and hurt him again.
   c. Your course of action would be to report your observations. Approach Mr. Gower with kindness and support. Do not touch him unless he indicates that it is O.K. Spend time with him without pressuring him about his injuries. Ask him to watch television with you when you have time. Observe new bruises and report them.

5. a. If Drew shared the information with the second therapist, with intent to discuss how to proceed with treatment, there would not be a problem. If the intent of sharing the information was to ridicule the conditions and because Mr. Ford has given money, the client's right's were abused.
   b. Drew should report the condition of the apartment to the agency providing treatment. The unsanitary conditions would most likely contribute unfavorably to the client's condition.
   c. Drew did not violate client rights, but he did violate professional ethics by accepting a gift from Mr. Ford. In this instance, Mr. Ford believed he was buying Drew's silence. Even if this was not the intent, it could be viewed as such.

ANSWERS TO EVALUATION ITEMS:

1. b
2. g
3. h
4. e
5. c
6. a

7. f
8. d
9. c
10. a
11. b
12. b
13. a
14. c
15. d
16. b
17. b
18. b
19. a

20. a. Name and address of client
    b. Name and address of the facility
    c. Nature and extent of victim's condition or nature of abuse or neglect
    d. Name of person making report or complaint
    e. Name of alleged perpetrator

21. A grievance is a cause of distress which justifies complaint or resistance.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT I: HEALTH CARE DELIVERY SYSTEM

EVALUATION ITEMS:

Match the following terms in Column I with the definitions in Column II.

Column I	**Column II**
___ 1. Conduct	a. Verbally threatening to hurt someone
___ 2. Battery	b. One's actions in general
___ 3. False imprisonment	c. Failure to perform in an acceptable manner
___ 4. Slander	d. The discipline dealing with that which is good and bad
___ 5. Negligence	e. Spoken defamatory matter about an individual
___ 6. Assault	f. Written defamatory matter about an individual
___ 7. Libel	g. Unlawful application of force to the person of another
___ 8. Ethics	h. Holding someone against his/her will

Match the following terms in Column I with the definitions in Column II.

Column I	**Column II**
___ 9. Exploitation	a. The infliction of physical, sexual, or emotional injury or harm
___ 10. Abuse	b. Failure to adequately take care of a person, causing danger to him/her
___ 11. Neglect	c. Illegal or improper use of a person's property to the degree that substantial risk or harm exists

Circle the letter that corresponds to the best answer.

12. Which is a true statement concerning documentation on a client chart?

    a. White out errors made when charting.
    b. Use ball point ink pen at all times.
    c. Charting with a pencil is acceptable practice.
    d. The chart is not a legal document.

13. Which of the following are common rights of all patients, residents, or clients?

    a. To be free from abuse or neglect, to be treated with respect, and to be informed
    b. To be free form abuse or neglect, to be treated with respect, and to be spared from information that may make the client upset
    c. To be free from abuse or neglect, to be treated with respect, and to be given treatments that they client doesn't want; it is for their own good
    d. To be free from abuse or neglect, to be ensured that the assistant will tell important confidential information to people, and to be informed

14. Which one of the following is an example of resident's rights?

    a. A nursing student can observe a procedure performed on the client without his/her permission.
    b. Clients and their visitors must visit in an area where you can hear and see them.
    c. Letters sent to the client must not be opened by the health care assistant without the client's permission.
    d. Clients must use the telephone in an area where the conversation can be overheard.

15. The right to participate in client and family groups means:

    a. The client's family can only meet with the client, not with families of other clients.
    b. The group may meet but not recommend changes in facility policy.
    c. The client has the right to participate in religious activity but must get to the activity without assistance from the facility.
    d. The group can discuss concerns and offer suggestions to improve the quality of life in the facility.

16. When a client has an item lost, stolen, or damaged the facility must investigate the situation and police assistance requested if necessary. This is an example of the resident's right to:

    a. Freedom from abuse.
    b. Care and security of personal possessions.
    c. Freedom from mistreatment.
    d. Privacy and confidentiality.

17. The right to not have body movement restricted is an example of freedom from:

    a. Security
    b. Restraints
    c. Participation
    d. Verbal abuse

18. If you suspect abuse, neglect, or exploitation of a client, you would notify:

    a. The State Board of Nursing
    b. The Division of Aging
    c. The attorney general's office
    d. The local prosecutor's office

19. The health care assistant can prevent legal and ethical problems from developing while caring for a client by:

    a. Not violating client's rights.
    b. Doing everything you're told to do even if you have not been taught the task.
    c. Giving personal information concerning the client to family members over the phone.
    d. Discussing a client's behavior with a co-worker while traveling home on a bus.

20. List five areas of information needed when reporting an abuse, neglect, or exploitation case.

    a. ______________________________
    b. ______________________________
    c. ______________________________
    d. ______________________________
    e. ______________________________

21. Define the term *grievance*.

____

____

RESIDENT'S RIGHTS - STATE OF MISSOURI

NOTE: I, II, and III refer to the type of deficiency in standards. See the state regulations for more information.

Requirements for all types of Licensed Long-term Care Facilities, 1991.

The resident has the:

1. Right to be fully informed of his/her rights and responsibilities as a resident and of all facility rules governing resident conduct and responsibilities. A copy of the resident's rights along with rules governing conduct and responsibilities must be provided all incoming and present residents in the facility. The facility must document that this information was given to the resident or his/her legal guardian. (III) Information regarding resident's rights and facility rules must be posted in a conspicuous location in the facility and copies be provided to anyone requesting this information. (III)

2. Right to be fully informed in writing of services available and the charges for those services if they are not covered in the daily room charge. The resident must be informed in writing of charges and of rate changes during his/her stay. The resident has the right to choose his/her own supplier for services not included in the daily rate. Information provided must include procedures to be followed by the facility in case of medical emergency, including transfer agreements and cost. (II, III)

3. Right to be fully informed by a physician of his/her health and medical condition, unless medically contraindicated, (I, II) and has the right to participate in planning his/her medical treatment. (II)

4. Right of selecting his/her own physician who will be responsible for the resident's total care. (II)

5. Right to be transferred or discharged only for medical reasons, or his/her health or welfare or that of other residents; or for nonpayment of stay. (II) If a resident is transferred or discharged for the welfare of other residents, the facility must have first informed the resident, family, or legal guardian of the rules and how the conduct represents a threat to the health or welfare of the other residents. (III) The resident, family, or legal guardian must be given ten (10) days notice of discharge or transfer except in an emergency situation. Room transfer within the facility is permitted if it does not result in any detriment to the resident's mental, physical, or emotional condition and should be explained as far ahead of time as possible. (II, III)

   A reasonable effort to arrange for services to assure continuity of care in meeting the resident's needs through other resources must be made if the resident is transferred or discharged. (II, III)

6. Right to exercise his/her rights as a resident and as a citizen, to voice grievances, and to recommend changes in policies and services to facility personnel or to outside representatives of his/her choice. A staff person shall be designated to receive complaints.

The facility shall assist residents in exercising their right to vote. (II, III) The exercise of resident's rights shall be free from restraint, interference, coercion, discrimination, or reprisal. (II, III)

7. Right to see copies of inspection and deficiencies and copies of plan(s) of correction and revised inspection reports. (II, III)

8. Right to be free of chemical and physical restraints except when authorized in writing by a physician for a specified period of time. (I, II) In an emergency, a physical restraint may be used to protect the resident from injury to himself/herself or others if authorized by the administrator, licensed nurse, or the operator. This action must be reported to the physician immediately and an order obtained which includes the length of time the restraint may be used, type of restraint, reason for restraint, and what course of action to take. This order must be signed by the physician within seven (7) days. (II, III)

9. Right to confidential treatment of any medical, personal, or financial records and may approve or refuse the release of records to anyone outside the facility. (II, III) Facility personnel shall not discuss aspects of the resident's record or care in front of persons not involved in the resident's care or in front of other residents.

10. Right to be treated with consideration, respect, and full recognition of his/her dignity and individuality, including privacy in treatment and care of his/her personal needs. (II, III)

11. Right not to be required to perform services for the facility that are not for therapeutic purposes in the plan of care. (II, III)

12. Right to communicate with persons of his/her choice. (II, III)

13. Right to meet alone with persons of his/her choice and in an area which assures privacy. (II, III)

14. Right to accessible use of telephones to make and receive calls and privacy when possible. (II, III)

15. Right to privacy of his/her mail. If a resident cannot open mail, a written consent by the resident or legal guardian must be obtained to have mail opened and read to the resident. (II, III)

16. Right to meet with and participate as well as not participate in activities of social, religious, and community groups at his/her discretion unless medically contraindicated. (II, III)

17. Right to keep and use personal clothing and possessions as space permits. There must be a record of all personal items which the resident brings with him/her upon admission or brought to him/her during his/her stay. These items are to be returned to the resident or responsible party upon discharge, transfer, or death. (II, III)

18. Right, if married, to privacy for visits by his/her spouse. If both parties are residents of the home, they will be permitted to share a room unless medically contraindicated. If the married couple's door is closed, personnel must knock and wait for an invitation to enter. (II, III) If no response is given, staff shall be permitted to enter the room.

19. Right for the option of purchasing or renting goods and services not included in the monthly per diem rate from a supplier of his/her choice, providing the quality of the goods and services meets the reasonable standards of the facility. Freedom to choose a pharmacy shall be permitted provided the facility's policy and procedures for packaging specifications are met. (II, III)

20. Right to not have their personal lives regulated or controlled beyond reasonable adherence to meal schedules and other written policies which may be necessary for the orderly management of the facility and the personal safety of the residents. (II)

21. The facility shall retain and make available for public inspection a list of names, addresses, and occupations of all individuals who have property interest in the facility. Also, the facility shall retain and make available for public inspection the statements of deficiencies, copies of plan(s) of correction, acceptance or rejection of the plan(s) and the revisit inspection report. (II, III) Any notice of non-compliance and inspection report shall be posted in a conspicuous location. (II, III)

22. A copy of the most current Division of Aging rules shall be kept in an easily accessible place for all persons to read. (II, III)

RESIDENT'S RIGHTS - FEDERAL

Residents have a right to dignity, self-determination, and communication with and access to persons and services inside and outside the facility. This facility shall protect and promote the rights of each resident which shall include the following rights:

1. RIGHT TO EXERCISE RIGHTS AS A RESIDENT of the facility AND AS A CITIZEN of the United States. The right to be free of interference, coercion, discrimination, or reprisal from the facility in exercising these rights. If the resident is adjudged legally incompetent, the rights of the resident are exercised by the person appointed by law to act on the resident's behalf.

Example:
A resident of a nursing facility, unless he or she has a legal guardian, has all the rights that any other citizen has. For example, if Mary Brown wishes to vote in the annual elections for county officials, she may request an absentee ballot. If she is physically able to go out of the facility, she may go to the polls and vote.

Another example would be the event of theft of personal property from a resident in the nursing facility. The resident has the right to have a police investigation and file charges if he or she so desires.

THE RIGHT TO BE FREE OF INTERFERENCE, COERCION, DISCRIMINATION, OR REPRISAL FROM THE FACILITY IN EXERCISING THESE RIGHTS.

Example:
Mary Brown had a diamond ring in her room at the nursing facility. It was missing when she returned from lunch. Using the telephone in her room, she called the police. Later, the ring was found in another drawer in her room. Mrs. Smart, the administrator, threatens Mary Brown, saying, "If you ever call the police to this nursing home again, I'll have the phone removed from your room!" This is an example of interference, discrimination, and reprisal against a person exercising her rights as a citizen. Had Mrs. Smart been present before Mrs. Brown called the police and talked her out of calling the police by saying "If you call the police, it will cause a lot of trouble for you here!", that would be an example of coercion.

IF THE RESIDENT IS ADJUDGED LEGALLY INCOMPETENT, THE RIGHTS OF THE RESIDENT ARE EXERCISED BY THE PERSON APPOINTED BY LAW TO ACT ON THE RESIDENT'S BEHALF.

Example:
Jane Doe, age 79, has Alzheimer's Disease and is no longer able to make her own decisions. Her son, Paul Doe, lives in the community and was appointed to be guardian for his mother. He may make all pertinent decisions for his mother. Two years later, Paul Doe is transferred to a job 1,000 miles away. Because of his inability to be present, he asks the Public Administrator to accept appointment as his mother's guardian.

It will be found, however, that not all persons who are unable to make decisions have guardians appointed. For those persons, nursing staff need to consult with family, social services, physician, and administration to decide on a plan of care.

2. RIGHT TO BE INFORMED OF RULES AND REGULATIONS...To be informed orally and in writing of his or her rights and rules and regulations governing resident conduct and responsibilities during the stay in the facility.

   Example:
   When Bill is admitted to a nursing facility, the rights as well as rules, regulations, and responsibilities must be reviewed with Bill and/or his family. Because of the large amount of information being presented, Bill will need to have these rights reviewed with him during his stay also.

3. RIGHT TO DOCUMENTATION...has the right to orally or in writing request access to all records pertaining to himself/herself. The records must be furnished within 24 hours of the request. After receipt of the records, the resident has the right to purchase at a community standard cost photocopies of the records. The facility has two days to furnish the photocopies.

4. RIGHT TO MEDICAL CONDITION INFORMATION...The right to be fully informed in understandable language of total health status, including, but not limited to, his or her medical condition.

   Example:
   Mary Brown asks Pam Perfect, nurse assistant, to tell her what is "really wrong with me." Pam knows that she cannot tell Mrs. Brown about her medical condition. She goes to the charge nurse and tells her Mary Brown wants to know more about her medical condition. The charge nurse reviews Mrs. Brown's medical record and goes to Mary Brown's room to discuss her condition with her. THIS IS THE CORRECT WAY TO HANDLE THIS SITUATION AND PROTECT THE RESIDENT'S RIGHT TO BE INFORMED ABOUT HER MEDICAL CONDITION.

5. RIGHT TO REFUSE TREATMENT AND PARTICIPATION IN RESEARCH...has the right to refuse treatment in accordance with state laws and to refuse to participate in experimental research.

   Example:
   A new drug for the treatment of high blood pressure is available on a limited basis for test studies. Several residents of the nursing facility are asked to participate in a study of the effectiveness of the new drug. John Doe is one of the residents asked, but he refuses. THIS IS HIS RIGHT.

6. RIGHT TO KNOW SERVICES AVAILABLE...has the right to be informed before, or at the time of admission, and periodically during his or her stay, of services available and of charges for those services, including charges for services not covered under Medicare or by the facility's per diem rate.

Example:
Upon admission, Melvin Brown and/or his family must be made aware of the current charges and of all the services that are available. For example, if a telephone may be installed in the room for an extra charge, Melvin should be told. If permanents are given at the beauty shop, the cost should be made known. Other services that Melvin might wish to obtain include: therapy services, items that may be ordered from an outside businesses (food, cosmetics, toiletries, etc.).

7. RIGHTS TO A WRITTEN DESCRIPTION OF LEGAL RIGHTS WHICH INCLUDE:

   A. A description of the manner of protecting personal funds.

   B. A description of the requirements and procedures for establishing eligibility for Medicaid.

   C. A posting of names, addresses, and telephone numbers of all pertinent state client advocacy groups such as the state survey and certification agency, the state licensure office, the state ombudsman program, the protection and advocacy network, and the Medicaid fraud control unit.

   D. A statement that the resident may file a complaint with the state survey and certification agency concerning resident abuse, neglect, and misappropriation of resident property in the facility.

8. THE RIGHT TO BE INFORMED OF THE NAME, SPECIALTY, AND WAY OF CONTACTING THE PHYSICIAN RESPONSIBLE FOR HIS OR HER CARE.

9. THE RIGHT TO ORAL AND WRITTEN INFORMATION ABOUT HOW TO APPLY FOR AND USE MEDICARE AND MEDICAID BENEFITS, AND HOW TO RECEIVE REFUNDS FOR PREVIOUS PAYMENTS COVERED BY SUCH BENEFITS.

10. RIGHTS PERTAINING TO NOTIFICATION OF CHANGE

   A. A facility must immediately inform the resident; consult with the resident's physician; and if known, notify the resident's legal representative or an interested family member when there is:

      1) An accident involving the resident and has the potential for requiring physician intervention.

      2) A significant change or deterioration in the resident's health, mental, or psychosocial status in either life-threatening conditions or clinical complications.

      Example:
      Mary Brown has generally been able to manage dressing herself daily and going to the bathroom alone. One morning before breakfast, she is found in her room taking all the contents out of her drawers and is rambling, "I know my coffee pot

is in here somewhere." This indicates a serious change in mental condition and notification must be made.

3) A need to discontinue an existing form of treatment or to commence a new form of treatment.

Example:
Changes in medication, especially a new medication, would be an example of significant change of treatment. For example, John Doe is a resident. On monthly blood pressure check, the reading is found to be too high. After re-checking the reading, the physician orders a new blood pressure medication. The situation must be explained to the resident and family.

4) A decision to transfer the resident from the facility. Any time it becomes necessary to transfer a resident to a hospital or other health care facility, the notification must be made.

B. The facility must also promptly notify the resident and if known, the resident's legal representative or interested family member when there is:

1) A change in roommate

Example:
Two roommates, Jane Doe and Mary Badmood, have an argument. Both are upset and Mary insists on moving to another room immediately. Another room is available and Mary moves within the hour. Notification must be made.

2) A change in resident's rights under federal or state laws or regulations.

C. The facility must record and periodically update the address and phone number of the resident's legal representative or interested family member.

11. THE RIGHT TO MANAGE HIS/HER FINANCIAL AFFAIRS, AND THE FACILITY MAY NOT REQUIRE THE RESIDENT TO DEPOSIT HIS/HER PERSONAL FUNDS WITH THE FACILITY.

A. Upon written authorization of a resident, the facility must hold, safeguard, manage, and account for funds deposited with the facility.

B. The facility must deposit any resident's personal funds in excess of $50 in an interest bearing account that is separate from any of the facility's operating accounts, and credit all interest earned on the resident's funds to that account.

C. A resident's funds that do not exceed $50 may be kept in a non-interest bearing account, or petty cash fund.

D. The facility must establish and maintain a system that assures a full and complete and separate accounting of each resident's personal funds.

1) The system must not commingle the resident's funds with the facility funds or with the funds of any person other than another resident. .

2) Financial records must be made available through quarterly statements by request of the resident or legal representative.

E. The facility must notify each resident that receives Medicaid benefits when:

1) The account reaches $200.

2) The amount in the account, in addition to the value of the resident's other nonexempt resources, reaches the Supplementary Security Income (SSI) resource limit for one person.

F. Upon death of a resident with a personal fund, the facility must convey within 30 days the resident's funds and an accounting of these funds to the individual or probate jurisdiction administering the resident's estate.

G. The facility must purchase a security bond, or otherwise provide assurance satisfactory to the head of federal health care finance administration, to assure the security of all personal funds of the resident deposited with the facility.

H. The facility may not impose a charge against the personal funds of a resident for any item or service for which payment is made under Medicaid or Medicare.

12. RIGHT OF CHOICE OF PHYSICIAN AND PARTICIPATION IN PLAN OF CARE...has the right to choose a personal physician and be fully informed in advance of care and treatment which may affect the resident's well-being; and, unless adjudged incompetent or incapacitated by a court of law, participate in the plan of care and treatment or changes in care or treatment.

Example:
A facility may not urge that a resident choose a physician of the facility's choosing. If the resident has a preference of physician that will provide services at the facility, that physician must be asked to take the resident's case.

13. RIGHT TO PRIVACY AND CONFIDENTIALITY of his or her personal and clinical records which includes accommodations, medical treatment, written and telephone communications, personal care, visits and meetings with family and resident groups; however, this shall not require the facility to provide a private room. The resident may approve or refuse the release of personal clinical records to an individual outside the facility. This right does not apply to situations when the resident is transferred to another health care facility or the record release is required by law or third party contract. (e.g., Medicare, Medicaid, or insurance)

Example:
Jane Doe must be bathed by facility personnel. It must be assured that her privacy will be protected by having the curtains, both the window and cubicle, drawn; and the door will be closed. It will also be necessary to cover Mrs. Doe with a bath blanket and expose only the part of the body that is being bathed.

14. RIGHT TO VOICE GRIEVANCE...In respect to treatment or care that is given or failed to be given, the resident has the right to voice a grievance without discrimination or reprisal for voicing grievances and to expect prompt efforts by the facility to resolve the grievance. This includes grievances pertaining to the behavior of other residents.

    Example:
    Residents are upset by another resident yelling several hours each day. One resident, Mary Smith, comes to the administrator to complain. Some action will be required.

15. RIGHT TO EXAMINE SURVEY RESULTS...the most recent inspection of the facility conducted by federal or state surveyors and the facility's plan of correction must be made available if resident wishes to examine them.

16. RIGHT TO CONTACT WITH PATIENT ADVOCACY SERVICES...the resident has the right to receive information from agencies acting as client advocates and be afforded the opportunity to contact these agencies.

    Example:
    A resident may have private visits from anyone he or she wishes to see. This may include ombudsman representative, attorneys, etc.

17. RIGHT TO REFUSE WORK...the resident cannot be required to perform services for the facility. The resident can perform services for the facility if he or she chooses when:

    A. There is documented need or desire for work in the plan of care.

    B. The plan specifies the nature of the services performed and whether the services are voluntary or paid.

    C. Compensation for paid services is at or above prevailing rates.

    D. The resident agrees to the work plan.

18. RIGHT OF PRIVACY OF HIS/HER MAIL...the resident has the right to send and promptly receive mail unopened and has access to stationery, postage, and writing implements at the resident's own expense.

    Example:
    John Doe, a resident in Good Rock Home, gets upset when he receives mail from his ex-wife. Even though the staff thinks it might be best if John Doe didn't get this mail, it IS HIS RIGHT TO DO SO.

19. RIGHT OF ACCESS AND VISITATION RIGHTS...the resident has the right to have immediate access to any representative of the Secretary of the Department of Health and Human Resources, any representative of the State of Missouri, the individual's physician, the long-term care ombudsman, and the agency responsible for the protection and advocacy system for developmentally ill individuals and for the mentally ill. The resident has the right for families and others to visit freely. The resident, however, may refuse to see any of the above if he/she desires. The ombudsman may also examine the clinical record, with the permission of the resident or the resident's legal representative, and consistent with the state law.

20. RIGHT TO TELEPHONE...the resident has the right to regular access to private use of a telephone where calls can be made without being overheard.

    Example:
    Residents may use a telephone regularly. They may be held responsible for paying long distance service charges.

21. RIGHT TO HAVE PERSONAL PROPERTY...the resident has the right to retain and use personal possessions including some furnishings and appropriate clothing as space permits, unless to do so would infringe upon the rights or health and safety of other residents.

    Example:
    When John Doe came to Good Rock Nursing Home, he had been living in a four-room house. A pick-up truck and a van delivered his possessions to the nursing home. John Doe has the right to keep his personal possessions, only to the extent that it does not infringe upon the space of others. Obviously, John Doe will have to send some of his possessions to another location. John should never be required to wear clothing other than his own.

22. RIGHT TO MARITAL PRIVACY...the resident has the right to share his/her room with the spouse when married residents live in the same facility and both spouses consent to the arrangement.

    Example:
    Mr. and Mrs. M. are residents of the same facility. They wish to be in the same room. They have the right to do this. They also have the right to privacy when they wish.

23. RIGHT TO SELF-ADMINISTER DRUGS...the resident has the right to self-administer drugs unless the inter-disciplinary health care team determines that the practice is unsafe for this resident.

24. RIGHTS PERTAINING TO TRANSFER AND DISCHARGE...the resident must be permitted to remain in the facility, and not be transferred or discharged unless:

    A. The transfer or discharge is necessary for the resident's welfare and the resident's needs cannot be met in the facility.

    B. The resident's health has improved sufficiently so that the resident no longer needs the services provided by the facility.

    C. The safety and/or health of others in the facility are endangered.

    D. The resident has failed, after reasonable and appropriate notice, to pay for (or to have paid under Medicare and Medicaid) a stay at the facility.

    E. All information, including reasons, pertaining to the transfer or discharge must be documented in the clinical record.

F. NOTICE BEFORE TRANSFER...before a facility transfers or discharges a resident, personnel must notify the resident and, if known, a family member or legal representatives as to the location of the transfer.

G. Notice will be given at least THIRTY DAYS in advance, except in cases of emergency or risk of personal safety of the resident or others. The resident and/or legal representatives will be informed as to the location to which he/she is being transferred. The resident has the right to appeal the decision.

H. The facility will provide sufficient preparation and orientation to ensure a safe and orderly transfer.

I. A written notice of the bed-hold policy and readmission must be provided to the resident and a family member or legal representative before a resident is transferred to a hospital or allowed to go on therapeutic leave.

25. RIGHT TO BE FREE OF CHEMICAL OR PHYSICAL RESTRAINT...the resident has the right to be free from physical restraints and psychoactive drugs that are used for convenience of the staff and not required to treat the resident's medical symptoms.

Example:
John Doe becomes restless and begins to pace in the hall several hours each day. Some staff members are upset because John refuses to go to bed at the "right" time. They want the physician to order a tranquilizer or allow them to use a waist restraint to keep him in bed.

26. RIGHT TO BE FREE OF ABUSE...resident has the right to be free from verbal, sexual, physical, or mental abuse, corporal punishment, and involuntary seclusion. Any instances of such abuses must be thoroughly investigated and reported to the Division of Aging.

A. There must be written policies and procedures that prohibit mistreatment, neglect, and abuse of residents and misappropriation of residents' properties. The facility must:

1) Not use verbal, mental, sexual, or physical abuse, corporal punishment, or involuntary seclusion.

2) Not employ individuals who have been found guilty of abusing, neglecting, or mistreating individuals by a court of law or have had a finding entered into the state nurse assistant registry concerning abuse, neglect, and mistreatment of residents or misappropriation of their properties.

3) Report any knowledge it has of actions by a court of law against an employee, which would indicate unfitness for service as a nurse assistant.

B. The facility must report all alleged violations involving mistreatment, neglect, or abuse, including injuries of unknown source, and misappropriation of resident's property immediately to the administrator of the facility.

C. There must be evidence that all alleged violations are thoroughly investigated.

D. Within five (5) working days, all investigations must be reported to the administrator or his/her designated representative and to other officials in accordance with state laws.

Examples:
"Shut up and help me get your clothes on!", "You have wet your pants again!," and "Eat your supper or you won't get a cigarette tonight." after which the resident was withdrawn and crying are all examples of verbal abuse.

While giving personal care, a nurse assistant makes fun of and plays with the genitals of the resident. This is an example of sexual abuse.

A resident refuses to get up from her chair to go to the shower room. The angry nurse assistant grabs the resident forcefully from the chair which causes pain in both of the resident's arms. This is physical abuse, even if no visible injury occurs. While some behavior may not be considered abuse, the nurse assistant must treat all residents with respect.

Teasing a resident, hiding his/her possessions, ignoring, or neglecting him/her with a resultant feeling of sadness for the resident, loss of self-esteem, anger, frustration, etc., are all instances of mental abuse.

Striking a resident with a ruler for "misbehavior" is an example of corporal punishment.

Shutting a resident in a room alone, against his or her will, is an example of involuntary seclusion.

27. RIGHT TO QUALITY OF LIFE...care must be provided in a manner and in an environment that promotes maintenance and enhancement of each resident's quality of life.

Example:
It is not usually enough to keep a resident clean and well-fed. Residents' lives can be enhanced in many ways by special acts performed by nurse assistants. Putting make-up on residents that were accustomed to that in their normal routine, using perfume or after-shave, tuning the radio or TV to a favorite program, and discussing current events with them while giving care are just a few of the ways that "quality" can be added to life.

28. RIGHT TO DIGNITY...care must be provided in a manner and in an environment that maintains or enhances each resident's dignity.

Example:
Calling each resident by the name he or she prefers, speaking directly to the resident in a pleasant tone of voice, and smiling while you converse all contribute to the feeling of dignity. Having the resident's room in good order with home-like touches (photos, favorite ornaments, etc.) also assures this right.

29. RIGHT TO SELF-DETERMINATION...the resident has the right to choose activities, schedules, and health care consistent with his/her plan of care. The resident has the

right to interact with members of the community both inside and outside of the facility and to make significant choices about life in the facility.

Example:
Having choices in daily life is important to everyone. Residents must be given the opportunity to choose as often as possible. What clothes they will wear, activities to attend, foods they will eat, with whom they will visit, and when they will leave the facility for visits are among the choices they may make.

30. RIGHT TO PARTICIPATE IN RESIDENT AND FAMILY GROUPS...the resident has the right to participate in and organize groups in the facility. These groups have the right to meet in private. Staff or visitors may attend the meetings at the group's invitation. A specific person must be responsible for providing assistance and responding to written requests that result from the meeting. The facility must listen to the group's views and act on the grievances and recommendations presented.

    Example:
    A group of residents want to meet to discuss improvements they would like to see in the meals they are served. Not only may they meet in the facility in private, but the facility is obligated to listen to their views and act upon their suggestions.

31. RIGHT TO PARTICIPATE IN OTHER ACTIVITIES: SOCIAL, RELIGIOUS, AND COMMUNITY...resident may participate in any activity that does not interfere with rights of other residents of the facility.

    Example:
    John Doe is a member of the ELKS Lodge. He may go out of the facility for the meetings of this group. Mary Doe belongs to the Seniors Sunday School class at a local church. They both may go out to their meetings as long as they are able to make the trips.

32. THE RIGHT TO AN ONGOING PROGRAM OF ACTIVITIES designed to meet in accordance with the comprehensive assessment, the interest, and the physical, mental, and psychosocial well-being of each resident.

33. THE RIGHT TO MEDICALLY RELATED SOCIAL SERVICES which assist the resident to attain or maintain the highest practicable physical, mental, and psychosocial well-being.

PATIENT'S RIGHTS - PROPOSED BY BUREAU OF HOSPITAL LICENSING AND CERTIFICATION

Currently each hospital develops their own Patient Rights statements. Although similar there is no standard regarding the content of such statements. The following excerpts are from proposed legislation that would ensure that all acute care hospitals will have developed Patient Rights statements that include each of the following elements.

EXCERPTS FROM
BUREAU OF HOSPITAL LICENSING AND CERTIFICATION PROPOSED RULE
19CSR30-20.021

The chief executive officer shall be responsible for putting in place and implementing a mechanism to assure that patients' rights are protected. At a minimum, the mechanism shall include the following:

A. The patient has the right to be free from abuse or neglect:

B. The patient has the right to be treated with consideration and respect;

C. The patient has the right to protective oversight while a patient in the hospital;

D. The patient or his/her designated representative has the right to be informed pertaining to the hospital's plan of care for the patient;

E. The patient or his/her designated representative has the right to be informed, upon request, regarding general information pertaining to services received by the patient;

F. The patient or his/her designated representative has the right to participate in the patient's discharge planning, including being informed of service options that are available to the patient and a choice of agencies which provide the service;

G. When a patient has brought along personal possessions to the hospital, s/he has the right to have these possessions reasonably protected;

H. The patient has the right to accept medical care or to refuse it to the extent permitted by law and to be informed of the medical consequences of refusal. The patient has the right to appoint a surrogate to make health care decisions on his/her behalf to the extent permitted by law.

PATIENT'S RIGHTS - DEPARTMENT OF MENTAL HEALTH STATUTES

The following are excerpts from Chapter 630.115 of the Rules and Regulations developed by the Department of Mental Health to ensure patient/resident/client rights in regulated mental health agencies. Each licensed mental health agency is responsible for developing their own Patient Rights statement in which they must include elements that address each of the standards in the Chapter 630.115 Regulation.

EXCERPTS FROM DEPARTMENT OF MENTAL HEALTH CHAPTER 630.115

Patient's entitlements,

1. Each patient, resident or client shall be entitled to the following without limitation:

   (1) To humane care and treatment;
   (2) To the extent that the facilities, equipment and personnel are available, to medical care and treatment in accordance with the highest standards accepted in medical practice;
   (3) To safe and sanitary housing;
   (4) To not participate in nontherapeutic labor;
   (5) To attend or not attend religious services;
   (6) To receive prompt evaluation and care, treatment, habilitation or rehabilitation about which he is informed insofar as he is capable of understanding;
   (7) To be treated with dignity as a human being;
   (8) To not be the subject of experimental, research without his prior written and informed consent or that of his parent, if a minor, or his guardian; except that no involuntary patient shall be subject to experimental research;
   (9) To have access to consultation with a private physician at his own expense;
   (10) To be evaluated, treated or habilitated in the least restrictive environment;
   (11) To not be subjected to any hazardous treatment or surgical procedure unless he, his parent, if he is a minor, or his guardian consents; or unless such treatment or surgical procedure is ordered by a court of competent jurisdiction;
   (12) In the case of hazardous treatment or irreversible surgical procedures, to have, upon request, an impartial review prior to implementation, except in case of emergency procedures required for the preservation of his life;
   (13) To a nourishing, well-balanced and varied diet;
   (14) To be free from verbal and physical abuse.

2. Notwithstanding any other sections of this chapter, each patient, resident or client shall have the right to an impartial review of alleged violations of the rights assured under this chapter. (L. 1980 H.B.1724)

630.110. Patient's rights - limitations. -1. Each person admitted to a residential facility or day program operated, funded or licensed by the department, except to the extent that the head of the residential facility or day program determines that it is inconsistent with the person's therapeutic care, treatment, habilitation or rehabilitation, shall be entitled to the following:

   (1) To wear his own clothes and to keep and use his own personal possessions;

(2) To keep and be allowed to spend a reasonable sum of his own money for canteen expenses and small purchases;
(3) To communicate by sealed mail or otherwise with persons including agencies inside or outside the facility;
(4) To receive visitors of his own choosing at reasonable times;
(5) To have reasonable access to a telephone both to make and receive confidential calls;
(6) To have access to his mental and medical records;
(7) To have opportunities for physical exercise and outdoor recreation;
(8) To have reasonable, prompt access to current newspapers, magazines and radio and television programming.

2. Any limitations imposed by the head of the residential facility or day program or his designee on the exercise of the rights enumerated in subsection 1 of this section by a patient, resident or client and the reasons for such limitations shall be documented in his/her clinical record.
3. Each patient, resident or client shall have an absolute right to receive visits from his/her attorney, physician or clergyman, in private, at reasonable times.
4. Notwithstanding any limitations authorized under this section on the right of communication, every patient, resident or client shall be entitled to communicate by sealed mail with the department, his legal counsel and with the court, if any, which has jurisdiction over the person.

PATIENT'S RIGHTS - DEPARTMENT OF HEALTH - HOME HEALTH LICENSING

The following excerpts are from the Interpretive Guidelines for Home Health Agencies, Patients Rights 42 CFR 484.10. Each licensed home health agency must develop their own Patient Rights statement that addresses each of the following standards.

EXCERPTS FROM
INTERPRETIVE GUIDELINES-HOME HEALTH AGENCIES
PATIENT RIGHTS 42 CFR 484.10)

S484.10(a) Standard: Notice of rights.

(1) The patient has the right to exercise his or her rights as a patient of the home health agency (HHA).
(2) The patient's family or guardian may exercise the patient's rights when the patient has been judged incompetent.
(3) The patient has the right to have his or her property treated with respect.
(4) The patient has the right to voice grievances regarding treatment or care that is (or fails to be) furnished, or regarding the lack of respect for property by anyone who is furnishing services on behalf of the HHA and must not be subjected to discrimination or reprisal for doing so.
(5) The HHA must investigate complaints made by a patient or the patient's family or guardian regarding treatment or care that is (or fails to be) furnished, or regarding the lack of respect for the patient's property by anyone furnishing services on behalf of the HHA, and must document both the existence of the complaint and the resolution of the complaint.

S484.10© Standard: Right to be informed and to participate in planning care and treatment.

(1) The patient has the right to be informed, in advance about the care to be furnished, and of any changes in the care to be furnished.
    (I) The HHA must advise the patient in advance of the disciplines that will furnish care, and the frequency of visits proposed to be furnished.
    (ii) The HHA must advise the patient in advance of any change in the plan of care before the change is made.
(2) The patient has the right to participate in the planning of the care.
    (I) The HHA must advise the patient in advance of the right to participate in advance of the right to participate in planning the care or treatment and in planning changes in the care or treatment.
    (ii) The HHA complies with the requirements of Subpart I of part 489 of this chapter relating to maintaining written policies and procedures regarding advance directives. The HHA must inform and distribute written information to the patient, in advance, concerning its policies on advance directives, including a description of applicable State law.

S484.10(d) Standard: Confidentiality of medical records.

The patient has the right to confidentiality of the clinical records maintained by the HHA.

The HHA must advise the patient of the agency's policies and procedures regarding disclosure of clinical records.

S484.10(a) Standard: Patient liability for payment.

(1) The patient has the right to be advised, before care is initiated, of the extent to which payment for the HHA services may be expected from Medicare or other sources, and the extent to which payment may be required from the patient. Before the care is initiated, the HHA must inform the patient, orally and in writing, of __
   (i) The extent to which payment may be expected from Medicare, Medicaid, or any other Federally funded or aided program known to the HHA;
   (ii) The charges for services that will not be covered by Medicare; and
   (iii) The charges that the individual may have to pay.

(2) The patient has the right to be advised orally and in writing of any changes in the information provided in accordance with paragraph (e)(1) of this section when they occur. The HHA must advise the patient of these orally and in writing as soon as possible, but no later than 30 calendar days from the date that the HHA becomes aware of a change.

PATIENT SELF-DETERMINATION ACT

The Patient Self-Determination Act sponsored by Senator John Danforth of Missouri went into effect on December 1, 1991.

This act requires some health care organizations to provide written information to patients or residents about their rights under state law to make their own medical care decisions. These rights include the patients/residents right to refuse medical treatment and formulate advance directives.

Advance Directives

An advanced directive is a written instruction, such as a living will or durable power of attorney for health care, recognized under state law. This written directive relates to the provision of medical care when the individual is incapacitated.

Living Will

Missouri's Living Will Law allows a person (the declarant) to direct his/her doctor and medical facility (hospital, long-term care facility, etc.) to withhold or withdraw medical procedures that merely prolong the dying process.

The living will must be in writing, dated, and signed by the declarant or by a person other than the declarant at the declarant's express direction. If the living will is not in the declarant's handwriting, it must be witnessed by two persons.

Anyone making a living will should always keep the original and give copies to his/her doctor, hospital, long-term care facility, etc. (for inclusion in the medical files), and family members.

The living will can be revoked in any manner by which the declarant can show he or she wants to revoke it. The living will becomes effective only when the declarant is suffering from a terminal condition and is no longer able to make and communicate treatment decisions.

Durable Power of Attorney for Health Care

Missouri's recently enacted legislation provides citizens with a statutory right to designate others to make health care decisions for them if they become incapacitated.

The person you designate to make decisions for you may be any adult you trust to make important decisions for you, other than an attending physician or the owner/operator or employee of a health care facility where the patient is a resident.

The durable power of attorney for health care must be in writing, signed by the patient/resident, and notarized. It comes into effect only upon a certification of incapacity by two licensed physicians unless the document provides for a different number. In any event, certification by at least one physician is required. The durable power of attorney for health care may be revoked by a competent patient/resident at any time and in any manner.

Under the durable power of attorney for health care, the person designated to make these decisions may make every possible decision regarding health care. This includes decisions to enter a hospital, to undergo an operation, and even to terminate life-support systems. However, if you want to enable your designated decision maker to authorize the withdrawing or withholding of food and water, the document must provide a specific grant of authority to do so.

ABUSE AND NEGLECT REPORTING

Missouri Division of Aging

The Omnibus Nursing Home Act includes a section regarding the reporting of abuse or neglect. Section 198.070

1. Beginning January 1, 1980, mandated reporters shall report abuse and neglect immediately or cause a report on abuse and neglect to be made to the Department of Social Services. The mandated reporters include any physician, dentist, chiropractor, optometrist, podiatrist, intern, nurse, medical examiner, social worker, psychologist, minister, Christian science practitioner, peace officer, pharmacist, physical therapist, facility administrator, activities director, nurse's assistant, or orderly in facility or employee of the Department of Social Services or of the Department of Mental Health.

2. The report shall contain the name and address of the facility, the name of the resident, information regarding the nature of the abuse or neglect, the name of the complainant, and any other information which might be helpful in an investigation.

3. If a mandated reporter fails to report or cause a report to be made, he or she could be found guilty of an infraction and fined up to $200.00.

4. Any other person having reasonable cause to believe that a resident has been abused or neglected may report such information to the Department.

5. All reports should be made to the Division of Aging Elderly Abuse and Neglect Hot Line. The toll-free telephone number is 1-800-392-0210.

6. Upon receipt of a report, the Department shall initiate an investigation within 24 hours.

7. If the Department has reasonable cause to believe that immediate removal of the resident is necessary to protect the resident from abuse or neglect, the Department or local prosecuting attorney may file a petition for temporary care and protection of the resident in a circuit court. The circuit court may issue an ex parte order granting the temporary care for a period not to exceed 30 days.

8. Reports shall be confidential and shall not be deemed a public record and shall not be subject to the provisions of section 109.180, RSMo, chapter 610, RSMo. The name of the complainant or any person mentioned in the reports shall not be disclosed unless:

    a. the complainant or the resident mentioned agrees to disclosure;

    b. the Department determines disclosure of a resident's name is necessary to prevent further abuse or neglect of the resident;

    c. the Department determines that disclosure of the name of the facility employee is necessary to prevent further abuse or neglect;

   d. release of a name is required for conformance with a valid subpoena or in connection with a review by the administrative hearing commission.

9. Anyone who makes a report of abuse or neglect or who testifies in any administrative or judicial proceeding arising from the report shall be immune from any civil or criminal liability unless the report was made in bad faith or with malicious purpose.

10. No person who directs or exercises any authority in a facility shall evict, harass, dismiss, or retaliate against a resident or employee because he/she or any member of his/her family has made a report of any violation or suspected violation of laws, ordinances, or regulations applying to the facility which he/she has reasonable cause to believe has been committed or has occurred.

11. Any person who knowingly abuses or neglects a resident of a facility shall be guilty of a class D felony.

12. The Department shall maintain a record of the names of any persons who have been determined by the Department to have knowingly abused or neglected a resident while employed in any facility. The Department shall not include any name in such record until after an investigation of the allegation has been made and the person alleged to have knowingly abused or neglected a resident has been notified in writing mailed to the last known address of the person.

    The person will be informed that an allegation has been made and that an investigation tends to substantiate the allegation. The person will also be informed that his/her name will be included in the record of the Department as having knowingly abused or neglected a resident and the consequences of being so listed. The person has a right to challenge the allegation. If no reply has been received within thirty days of mailing the notice, the Department may include the name of each person in its record. If the person so notified wishes to challenge the allegation, he/she may file an application for a hearing with the Department. The Department shall grant the application within thirty days after receipt by the Department and set the matter for hearing. The hearing shall be conducted in the county of the person's residence by the Director of the Division of Aging or his/her designee. The person appealing such an action shall be entitled to be present at the hearing, in person and by attorney or representative, and shall be entitled to introduce into the record of such hearing any and all evidence, by witnesses or otherwise.

    The Director of the Division of Aging shall review all of the evidence in the appeal record and shall determine whether the person knowingly abused or neglected a resident. The Director of the Division of Aging shall include a statement of finding pertinent to the questions of issue. If the person fails to appeal the Department's findings, those findings shall constitute a final determination that the person has knowingly abused or neglected a resident.

13. Any person who disagrees with the decision made by the Director of the Division of Aging may appeal to the circuit court of the county in which such person resides within ninety (90) days from the date of the action and decision appealed from. Section 198.070.13 explains how to file the appeal with the circuit court.

14. The Division of Aging will provide licensed operators with the names of persons who knowingly abused or neglected a resident. No operator shall knowingly employ any

person who has been determined to have knowingly abused or neglected a resident and whose name is listed in the records maintained by the Division of Aging.

Department of Health

The Department of Health, Bureau of Hospital Licensing and Certification does not have an established hotline for patients to report abuse or neglect in Missouri hospitals. The course of action for patients who believe they have been abused, mistreated, or neglected is to complain to the administration of the hospital in which the situation is occurring or occurred . If the situation is not resolved to the complainant's satisfaction, a further complaint can be submitted to the Bureau of Hospital licensing, a division of the Department of Health. If the abuse or neglect occurs at the hands of a licensed practitioner, the patient may complained to the appropriate licensing agency. Further investigations will take place. The Board of Healing Arts will investigate complaints against physicians. The Board of Nursing will investigate complaints against licensed nurses.

Department of Mental Health

The Department of Mental Health has a telephone number that is to be used for filing complaints as well as receiving information. A client/patient who believes he or she has been abused or neglected may contact the Department of Mental Health by calling 1-800-364-9687. An investigation will be conducted by an agent of the Department.

Department of Health - Home Health Licensing

The Conditions of Participation: Home Health Agencies Regulations includes a section regarding informing the patient of the availability of the toll-free HHA hotline in the state. When an agency accepts the patient for treatment of care, the HHA must advise the patient in writing of the telephone number of the home health hotline established by the state, the hours of its operation, and that the purpose of the hotline is to receive complaints or questions about local Home Health Agencies.

ETHICAL AND LEGAL RESPONSIBILITIES - ACTIVITY SHEET

Student Name____ Date___________________

1. Sara's parents died in an automobile accident when she was a pre-teen. She has lived with relatives since that time. Her Aunt Mattie and Uncle Frank have been her immediate family for the last two years. Sara denies thinking about killing herself but she admits that she feels "alone and sad" for the last several months. She doesn't have any energy or interest in school or outside activities. Sara only wants to stay in her room without anyone around. Her Aunt brought her to a mental health facility where she was admitted for clinical depression two weeks ago. She says she likes her Aunt and Uncle okay but they won't let her make her own decisions. Aunt Mattie and Sara seem to get along okay. Aunt Mattie wants to help in anyway she can.

   Aunt Mattie asks you questions about how Sara is getting along such as:

   "What kind of therapy is Sara getting?"
   "What does she say about Uncle Frank and me?"
   "Does she act depressed here?"
   "Does she tell you she feels alone and sad?"

   a. As a psychiatric aide, what can you tell Aunt Mattie about Sara's behavior?

   ____

   ____

   b. What client right needs to be protected in this situation?

   ____

   ____

   c. How would you respond to Aunt Mattie's questions?

   ____

   ____

2. You are working as an assistant in a psychiatric institution. You overhear the psychiatrist and therapist discussing a new client admitted for therapy. You learn that in addition to his manic-depressive disorder Billy Fevor is and has been a homosexual most of his adult life. Billy reported that he has been in a short-term relationship with a married man. Billy is placed in Team I for therapy. Even though you are not the assistant that is responsible for the daily activities of clients in this team, you read Billy's assessment report that contains the name of the man he was involved with. You realize that the married man's wife is a friend of yours.

a. What decision will you make about getting the information about Billy to your friend?

____

____

b. How will you protect your client's rights in this situation?

____

____

c. Since you didn't actually read Billy's assessment record and you are not assigned to Team I, are you responsible for protecting any client rights?

____

____

3. Arlene is a voluntary admission client in an outreach psychiatric clinic. She has been diagnosed as Bi-polar Manic Depressive disorder. The psychiatrist has ordered that Arlene receive a new, experimental drug that is intended to control her rapid mood swings. Arlene refuses to take the medicine and does not intend to continue with her therapy. A psychiatric assistant, Jennifer, is trying to persuade Arlene to take her medicine. Jennifer tells Arlene that if she doesn't take the medicine, the Sheriff will come to her house and she will be taken to a mental hospital in chains. Arlene tells Jennifer that she will not go with the Sheriff if he does come. Jennifer responds that Arlene will have no choice in the matter when the Sheriff is told that she has not taken her medicine and is not continuing therapy.

   a. What are Arlene's rights in this situation?

   ____

   ____

   b. How would you protect Arlene's rights?

   ____

   ____

4. Mr. Gower is a 89 year old client in a residential care facility. He normally likes to watch television after dinner. He has suddenly stopped this usual routine and now goes immediately to his room and won't come out until the next morning. One of the nursing assistants noticed what appeared to be fresh bruises on both arms above the elbows while helping him on with his shirt. He pulled away suddenly and refused to answer any questions. He did not want anyone to touch him. The new nursing assistant on the evening shifts says he prefers to go to bed early.

   a. What might be the cause of Mr. Gower's sudden change in behavior?

   ____

   ____

   b. Why does Mr. Gower refuse to say what happened to cause the bruises?

   ____

   ____

   c. What would be your course of action?

   ____

   ____

5. Drew Collins, a respiratory therapy assistant, was making home care rounds to restock supplies for clients who were receiving treatments in their homes. When he entered Marshall Ford's apartment he was shocked at the dirty and unsanitary condition of the apartment. When he returned to the agency he met another respiratory therapy assistant and began immediately to describe to him the things he had observed in Mr. Ford's apartment. They both laughed at how Mr. Ford didn't seem to mind the filth, Drew said Mr. Ford told him to keep "things" to himself and he slipped a five dollar bill in Drew's hand.

   a. Since both people are employed by the same agency is there any harm in Drew discussing his observation with the second therapist? Why?

   ____

   ____

   b. What do you think Drew should do about the condition of the apartment?

   ____

   ____

c. Did Drew violate any client rights by taking the $5 since he had not asked Mr. Ford for the money? Explain why.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

SCOPE OF UNIT:

This unit is about how to chart accurately on the medical record; how to communicate effectively; how to make accurate observations about the clients and what to do with the information; how to use a care plan; basic telephone techniques; and measurements used in the health care field.

INFORMATION TOPIC: II-1 OR DEMONSTRATION:

COMMUNICATION SKILLS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with their correct definitions.
2. Identify the five elements of communication.
3. Explain the difference between verbal and nonverbal communication.
4. Identify factors that promote effective communication.
5. Identify the difference between hearing and listening.
6. Identify barriers that prevent effective communication.
7. List conditions that a client may have that makes communicating with him/her difficult.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1.	HO 1:	Showing Effective Communication and Using Verbal Skills
2.	HO 2:	How to Be a Good Listener
3.	HO 3:	Check Your Listening Skills
4.	HO 4:	Rate Your Communication Skills
5.	HO 5:	Types of Hearing Aids

6. HO 6: Operation of a Hearing Aid

7. HO 7: Communicating with the Aphasic Client

8. *Communicate Like a Pro*, video #R89, available from the Missouri Vocational Resource Center, 15 min.

9. Audiovisuals available from the Missouri Division of Aging Film Library

   a. *A Gift from Mrs. Timm*, video (TF #27), 16 min.
   b. *Assertiveness Training*, Vol. I (TF #150A) and II (TF #150B) videos, 90 min. each
   c. *Perception*, video (TF #30), 28 min.
   d. *Hands of Love*, video (TF #166), 60 min.
   e. *Peege*, video (TF #73), 28 min.
   f. *How to Listen Powerfully*, audiotape (TT #44), 4 tape series

10. Slide projector

11. Television and VCR

12. Tape player

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 1 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 9.

Gibb, Betty. *Certified Quality Inspection*. Unit 8: Introduction to Communications. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 7, Section 3.

Holt, Sharyn; Marlys Denny. *Core Employment Skills*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 1, Section 4.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 6.

INTRODUCTION:

One of the most important responsibilities and functions of the health care assistant is to communicate well with clients, families of clients, visitors, and coworkers. This is not always easy. Communication is simply an exchange of information which involves a sender (speaker) and a receiver (listener). To be effective, the message must be understood by both parties involved. Communication is a means by which you and your clients reach each other. You must allow the client to talk to you and listen very carefully to what he/she is saying. There are two types of communication: verbal and nonverbal. We will discuss these, as well as how to become more effective as a communicator.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Aphasia - language difficulty, due to brain damage, which can affect listening, speaking, reading, and writing skills

   B. Communication - the exchange of information accomplished by sending and receiving messages, resulting in understanding between the sender and the receiver

   C. Constructive criticism - criticism offered in a way that is acceptable and helpful

   D. Criticize - to find fault with someone or something

   E. Daydream - to let the mind wander

   F. Distractions - actions or noises around an individual that make it difficult for him/her to pay attention

   G. Empathy - identification with, and understanding of, another's situation, feelings, or motives

   H. Feedback - the return of a portion of the information sent; a reply that shows the message was received

   I. Jargon - specialized or technical language of a trade, a profession, or a group of people

   J. Listen - to pay attention in order to hear

   K. Nonverbal communication - messages sent and received through gestures, facial expressions, posture, and dress/appearance

   L. Slang - nonstandard vocabulary used and understood by a small group of people. Slang is often considered incorrect and sloppy

   M. Verbal communication - messages transmitted through the use of spoken words

II. The Five Elements of Communication **(II-2)**

A. Sender (speaker)

1. Source of information

2. May be a person or inanimate object like a TV or radio

B. Message - the information which is to be sent

C. Channel of transmission

1. If the message is spoken, it travels by sound waves to the listener.

2. If the message is written or gestured, it requires light to be seen.

D. Receiver (listener) - someone or something "hears" the message

E. Response

1. A person tries to understand and respond to the message.

2. If the receiver is a machine, its response may be a click.

III. Verbal and Nonverbal Communication **(II-3)**

A. Verbal communication is getting a message across through the use of words by speaking them. There are several types of verbal communication:

1. Greeting clients and visitors

2. Delivering and receiving messages

3. Carrying on conversations

4. Answering telephone

B. Nonverbal communication is getting a message across without the use of words; expressing feelings or emotions in other ways. Nonverbal communication is used almost 100% of the time. There are several types of nonverbal communication: **(II-4)**

1. Facial expressions - smile; frown; twist of the mouth; raised eyebrows

2. Gestures and body movements - a shrug of the shoulders; hand movements

3. Posture of the body - hunching over; standing straight

4. Tone of voice - sarcastic; friendly

5. Smells - the odor of stool; fragrance of cologne

6. Space - the distance between two people as they talk; how close a health care assistant gets to the client

7. Silence - approving; sympathetic; hostile

8. Touch - gentle; rough; conveys friendliness and affection

9. Receiving nonverbal communication

    a. Watch facial expressions.

    b. Study body movements and try to interpret their meaning (shifting, wringing hands).

    c. Watch for and interpret language "extras" (laughing, coughing, yawning).

    d. Notice clothing and jewelry to determine the person's mood and self-confidence.

    e. Be very careful not to over generalize and draw a wrong conclusion about a person based on his/her nonverbal communication.

10. Sending nonverbal communication.

    a. Use your body when talking - do not stand still and stiff.

    b. Do not be afraid to shake hands when greeting someone.

    c. Use your face to show pleasant feelings: smile.

    d. Be neat and clean; dress tastefully.

    e. Stand or sit at a comfortable distance.

    f. Include everyone in a discussion, even if you receive feedback from just one member of the group.

    g. When you talk with groups of people, do not flirt with members of the opposite sex. You may score points with that person, but you will lose the interest, attention, and patience of the others.

    h. Make the message your body sends the same as the one your words send.

    i. Good rule to follow: keep your hands below your neckline. Avoid playing with your hair, face, and neck.

IV. How to Communicate Effectively (HO 1) **(II-5)**

A. Introduce yourself frequently.

B. Show an interest in talking with the client. Speak clearly with a pleasant voice.

C. Allow time for talking.

D. Pace yourself to the speed at which the client talks.

E. Try to get at the client's eye level and stay within sight. Maintain eye contact.

F. Remember, when you communicate you are not only conveying words but also your attitudes and feelings about yourself and others.

G. If communication is not taking place, explore the reasons why.

H. Reminiscence is a form of communication for the elderly.

  1. A way of reviewing life; helps in a search for meaning, helps increase or regain self-esteem, and can even help the client prepare for death.

  2. Listen to his/her stories--this allows the client to feel he/she is leaving wisdom or insight to the young and validates that he/she had a meaningful life.

I. Pets may aid in communication.

J. Be positive; it is better to say what you can do rather than what you cannot do.

V. How Hearing and Listening Differ **(II-6)**

A. Hearing is a passive awareness of sound.

B. Listening is an active, intentional effort to hear the message and understand its meaning.

C. Nursing action (HOs 2 & 3)

  1. Requires concentration and close attention to what is being said and done.

  2. Have direct eye contact with the person who is speaking.

  3. Be alert when listening.

  4. Try to put aside your own prejudices and values.

VII. Barriers that Prevent Communication **(II-7)**

A. Changing the subject

B. Giving your own opinion about the person and his/her situation without being asked

C. Belittling a person's feelings

D. Seeming to be too busy

E. Jumping to conclusions before you know the entire story

F. Giving false or inappropriate reassurances

G. Causing fear of an unpleasant response

H. Interrupting frequently

I. Not waiting long enough for a reply (elderly people are slower to respond)

J. Words that sound alike (homonyms) may have a different meaning to the receiver than was intended by the sender.

    1. A "plane" is a flying vehicle.

    2. A "plain" is a wide, open field.

K. Meanings of words sometimes change from one generation to another.

VIII. Clients with Communication Difficulties **(II-8)**

A. Deafness

    1. Signs indicating hearing loss

        a. Loss of interest in group activity, in other persons, or in what is being said to him/her

        b. Apparent disregard for directions or suggestions

        c. An attempt to lip-read

    2. Encourage the client to use a hearing aid and give him/her time to adjust it. (HOs 5 & 6)

    3. Face the client in a lighted area; stand where he/she can see you.

    4. Use moderate tone of voice; do not shout at the client.

    5. Reduce background noise.

    6. Attempt to learn some sign language.

B. Blindness

1. Observe for signs indicating deteriorating eyesight.
    a. Stumbling or falling; holding on to objects when walking
    b. Using touch to find personal things
2. Encourage use of eyeglasses.
3. Use verbal communication if client can hear; use normal tone of voice.
4. Use touch.
5. Identify self when entering or leaving a room.
6. Keep surroundings the same--do not rearrange personal items or furniture without informing client.

C. Speech disorders (HO 7)

1. Dysarthria - weakness or paralysis of muscles of lips, tongue, and throat; may be due to brain damage from stroke or accident
2. Aphasia - language disorder in which client has difficulty understanding words and using them correctly due to damage of the part of the brain that controls speech
    a. Expressive - client has difficulty saying what he/she is thinking and wants to say; may also have trouble writing and making gestures to act out what he/she is trying to say
    b. Receptive - client cannot understand what is being said to him/her; gestures and pantomime may confuse him/her; may have difficulty understanding what he/she is reading or recognizing the words being read
3. How to communicate to client with speech disorder:
    a. Encourage client to express self in any way possible.
    b. Continue to talk to the client and encourage others to also.
    c. Use short, simple sentences and use the same words each time when you give directions.
    d. Watch the client for gestures or body movements that he/she may be communicating with.
    e. Be patient, do not speak for the client, although you may want to help him/her with words he/she is having difficulty with.

    f. Do not talk with another person in front of the client if he/she cannot understand.

    g. Remember the client is still considered an adult.

    h. Remember the basic principles of effective communication.

IX. Summary and Conclusion

  A. Terms and definitions

  B. The five elements of communication

  C. Verbal and nonverbal communication

  D. How to communicate effectively

  E. How hearing and listening differ

  F. Barriers that prevent communication

  G. Clients with communication difficulties

Remember, in order to be of help, you must learn to communicate with your clients. If at any time you have difficulty, try to determine the cause of the lack of communication. Review the information in this lesson often to keep yourself aware of the basic principles. Your effective communication skills are invaluable to both you and others. The next lesson is on the care plan.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

INTERACTION ITEMS:

1. How do you define the terms: communication, aphasia, constructive criticism, criticize, day dream, distractions, empathy, feedback, jargon, listen, nonverbal communication, verbal communication, and slang?
2. What are the five elements of communication?
3. How do verbal and nonverbal communication differ?
4. What are the eight types of nonverbal communications?
5. How can the health care assistant communicate effectively with the client?
6. How do hearing and listening differ?
7. What barriers prevent communication?
8. What conditions which the client may have could result in communication difficulties?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES

1. Show audiovisuals.
2. Have class members choose a partner; then have them talk nose to nose, then 15 inches away from one another, and then back to back. This exercise helps them to understand concept of "personal space". Discuss how they felt when talking from various distances.
3. Show and discuss communication boards.
4. Have students complete HOs 3 and 4. Discuss answers.

ANSWERS TO EVALUATION ITEMS:

1. d
2. g
3. b
4. f
5. a
6. e
7. d
8. b

9. d
10. Hearing
11. Listening
12. a
13. Blindness, deafness, speech disorders
14. T
15. F
16. T
17. T
18. T
19. T
20. T
21. 1
22. 1
23. 2
24. 1
25. 2
26. 2
27. 2

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II: COMMUNICATION AND OBSERVATION SKILLS

EVALUATION ITEMS:

Match the terms in Column I with the correct definition in Column II.

____ 1. Communication

____ 2. Nonverbal communication

____ 3. Verbal communication

____ 4. Slang

____ 5. Aphasia

____ 6. Listen

a. Language difficulty, due to brain damage, which can affect listening, speaking, reading and writing skills

b. Messages transmitted through the use of spoken words

c. To let the mind wander

d. The exchange of information accomplished by sending and receiving messages, resulting in understanding between the sender and the receiver

e. To pay attention in order to hear

f. Nonstandard vocabulary used and understood by a small group of people

g. Messages sent and received through gestures, facial expressions, posture, and dress/appearance

7. Which one of the following includes all of the elements of communication? (Circle the letter of the best answer.)

   a. Smells, space, silence, and touch
   b. Facial expressions, gestures, posture of body, and tone of voice
   c. Delivering and receiving messages and answering the telephone
   d. Sender, message, channel of transmission, receiver, and response

8. Verbal communication is: (Circle the letter of the best answer.)

   a. Using touch to send a message.
   b. Sending a message using words.
   c. The same as nonverbal communication.
   d. Sending a message without the use of words.

9. An example of effective communication is: (Circle the letter of the best answer.)

   a. Speaking loudly so the client can hear you.
   b. Talking fast so no one can interrupt you.
   c. The use of slang to get your point across.
   d. Maintaining eye contact with the client.

10. ________________ is a passive awareness of sound.

11. ________________ is an active, intentional effort to hear the message and understand its meaning.

12. All of the following are barriers that prevent communications except one. Which one is not a barrier to communications? (Circle the letter of the best answer.)

   a. Showing that you have time to listen to the client and you care
   b. Giving false or inappropriate reassurance to the client so they will feel better
   c. Interrupting the client frequently because they are talking slowly
   d. Telling the client to hurry up and reply, that you don't have all day

13. List three conditions that a client may have that makes communication difficult.

   a.
   b.
   c.

For each of the following, write "T" if the statement is true or "F" if it is false.

___ 14. There must be a sender and a receiver for communication to take place.

___ 15. Reminiscence is not a form of communication.

___ 16. Hearing is a passive awareness of sound; whereas, listening is an active intentional effort to hear the message and understand its meaning.

___ 17. An apparent disregard for directions or suggestions may be a sign of deafness.

___ 18. A person with a speech problem may know what he or she wants to say but is unable to say it.

___ 19. It is important to use the nonverbal communication technique of touching when communicating with the blind client.

___ 20. Always look directly at the client who is speaking to you.

On the line provided write 1 if the statement is a barrier to communication or a 2 if it is an effective way to communicate.

___ 21. Belittling a person's feelings

___ 22. Changing the subject

___ 23. Showing an interest in discussion

___ 24. Seeming to be too busy

___ 25. Listening

___ 26. Staying within sight of the client at eye level

___ 27. Pacing yourself to the speed at which the client talks

SHOWING EFFECTIVE COMMUNICATION AND USING VERBAL SKILLS

It is important for others to understand what you want to say, but you must first understand what is being said to you.

1. Listening is how you understand what is said to you. Good listening takes work.

    a. STEP ONE: Look into the speaker's eyes. This lets the speaker know that you think what he or she is saying is important and lets you see the emotion behind what is being said.

    b. STEP TWO: Block out any distractions. Concentrate on what is being said. Block out other thoughts, feelings or noises.

    c. STEP THREE: Don't close your mind before the conversation begins. Sometimes we close our minds because of a trait the speaker has or because we don't like the speaker. When you close your mind, you don't listen and don't communicate.

    d. STEP FOUR: Don't daydream. Daydreaming is the opposite of concentration. To listen well, you must concentrate.

    e. STEP FIVE: Don't plan a reply while listening. While you think of a reply, you may miss what is being said, even though you hear the speaker's voice.

2. "Feedback" is the responses you give a speaker in a conversation. Feedback lets the speaker know his or her message is understood. Feedback is needed because what is being said and what is being understood may be two different things.

3. "Positive" feedback means showing the speaker you are interested in what he or she is saying. Here are some ways to give positive feedback?

    a. Don't interrupt the speaker.

    b. Sit (or stand) up straight and lean slightly forward.

    c. Keep your eyes open.

    d. Don't fidget or look at your watch.

    e. Smile or laugh when the speaker makes a joke.

    f. Ask questions and say things that further the conversation.

    - Sometimes a question makes the message more clear. For example, "Do you mean the Carl of Carl's Deli?" or "Did you mean the Wednesday of last week or this coming week?"

    - Sometimes a question helps you get more information. For example, "Where can I find that form?" or "Under which heading is that article filed?"

g. Repeat or rephrase the message in the way you understood it. Often when you say how you understood the message, you reveal a misunderstanding quickly. You separate the message from the way it was understood.

For example: "In other words, you want the salad on that table, right?"

h. Reveal information that is important to the conversation. Don't add unneeded detail.

4. Conversation Techniques

Effective communication requires you to state a message in a way that does not distract from the message itself. As a speaker, you do not want your listener to misunderstand your message because of the way it is expressed.

a. STEP ONE: Use names in conversation. When you use his or her name, the person feels more comfortable.

- Use the name in an introduction. For example, "John, this is Harry. Harry is a friend of mine from..." "Hello, Harry. It is nice to meet you. Do you work around here, Harry?"

- Use the name while talking. For example, "That's a good idea, Charlotte." "We could go over to Sue's house later."

- Use the name at the end of the conversation. For example, "It was nice to meet you, Gary." "See you around, Doug."

b. STEP TWO: Don't be overbearing. Give the person you are talking to a chance to speak. By letting the other person take a turn, you receive valuable feedback and learn how to make your message more clear.

c. STEP THREE: Don't send unclear or vague messages. Words that may lead to vague and unclear messages are: always, everybody, sometimes, often, never, nobody and everything.

d. STEP FOUR: Use the correct level and tone of voice. Your voice's tone and level influence how your listener perceives the message you are sending.

If your voice is loud or harsh, the listener may think you are angry. If your voice is soft, the listener may think you are unsure of what your are saying.

e. STEP FIVE: Say "no" politely.

- Center your "no" on a thing, not a person so others do not take the "no" personally. For example, you should say, "The problem with your car seems to be a lack of gas," not "You didn't get gas; that is why the car won't run."

- Say what you can do and imply what you can't do. For example, you are asked to complete a task in two hours. Don't say, "I can't do that." Say, "I'll need three hours to do the job right."

- Imply the negative, rather than stating bluntly. For example, "this copier is used for company business," is better than, "don't use this copier for your own stuff."

f. STEP SIX: Ask questions, even when you are the speaker. Sometimes your listener will not know what to ask you (the speaker) about the message. Ask specific questions that let your listener know what the main point is.

HOW TO BE A GOOD LISTENER

1. STOP TALKING!
   You cannot listen if you are talking.

2. PUT THE SPEAKER AT EASE.
   Help the speaker feel free to talk. Provide what is often called a "permissive environment."

3. SHOW THE SPEAKER THAT YOU WANT TO LISTEN.
   Look and act interested. Do not read your mail while someone is talking. Listen to understand rather than to reply.

4. REMOVE DISTRACTIONS.
   Don't doodle, tap, or shuffle papers. Shut the door if it will be quieter.

5. EMPATHIZE WITH THE SPEAKER.
   Try to put yourself in the speaker's place so that you can see the point of view.

6. BE PATIENT.
   Allow plenty of time. Do not interrupt. Do not start for the door or walk away.

7. HOLD YOUR TEMPER.
   An angry person gets the wrong meaning from words.

8. GO EASY ON ARGUMENT AND CRITICISM.
   Do not put the speaker on the defensive. The speaker may "clam up" or get angry. Try not to argue; even if you win, you lose!

9. ASK QUESTIONS.
   Encourage the speaker and show you are listening. Questions also help to develop further points.

10. STOP TALKING!
    This is first and last, because all other listening skills depend upon it. You just can't do a good listening job while you are talking.

Nature gave people two ears but only one tongue, which is a gentle hint that listening is more important than talking!

Major benefits of good listening are:

- A good listener can make better decisions.
- A good listener saves time.
- Listening helps the speaker determine how well the message is being received.
- A good listener stimulates others to better speaking.
- Good listening decreases misunderstanding.

CHECK YOUR LISTENING SKILLS

Directions: Check your listening skills by answering the following questions.

Do you:

____ 1. Want to remember what is being said?

____ 2. Have an interest in the opinions of others?

____ 3. Give the speaker your attention?

____ 4. Face the speaker?

____ 5. Show facial expressions as feedback?

____ 6. Achieve eye contact?

____ 7. Keep an open mind?

____ 8. Allow the speaker to finish his/her speech without interruptions?

____ 9. Listen for main ideas: "My main point is...?"

____ 10. Recognize key phrases: "My main criticism is...?"

____ 11. Make an attempt to shut out other noises and distractions?

____ 12. Try to concentrate on what is being said?

____ 13. Anticipate what the speaker is going to say?

____ 14. Mentally summarize what the speaker has said?

RATE YOUR COMMUNICATION SKILLS

Your ability to communicate is important on the job. Communication requires skill in two directions - you have to be able to make the other person understand what you want to say, and you have to listen carefully so that you can understand what the other person is saying. You must be able to express yourself clearly in writing and be able to read and understand letters, instructions and other written matter.

Directions: Rate yourself on the communication skills that follow, using this point scale:

Excellent	5 points
Good	4 points
Average	3 points
Fair	2 points
Poor	1 point

Do you:

____ 1. Have a pleasant speaking voice, pitched neither too low nor too high?

____ 2. Speak at a moderate rate, neither too fast nor too slow?

____ 3. Speak loudly enough so that you can be heard comfortably?

____ 4. Avoid speaking in an affected, overly dramatic manner?

____ 5. Avoid saying "er" too often?

____ 6. Pronounce each word correctly and clearly?

____ 7. Write and speak in complete sentences?

____ 8. Speak and write so that the verb agrees with the subject?

____ 9. Punctuate so that the meaning of the sentence is clear?

____ 10. Limit the use of slang?

____ 11. Understand that the use of profanity is offensive to many?

____ 12. Organize your thoughts so that you can write and speak in a logical manner?

____ 13. Refrain from interrupting others while they are speaking?

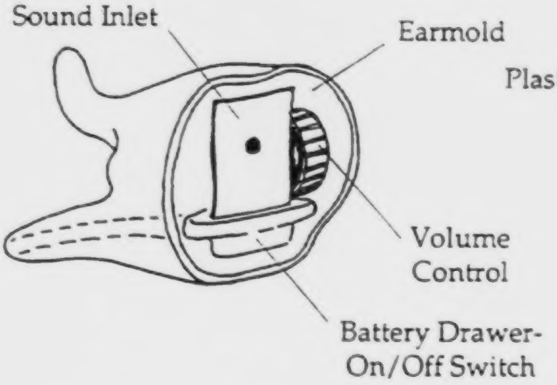
____ 14. Listen to what the other person is saying, instead of planning what you are going to say next?

____ 15. Know when you have said enough?

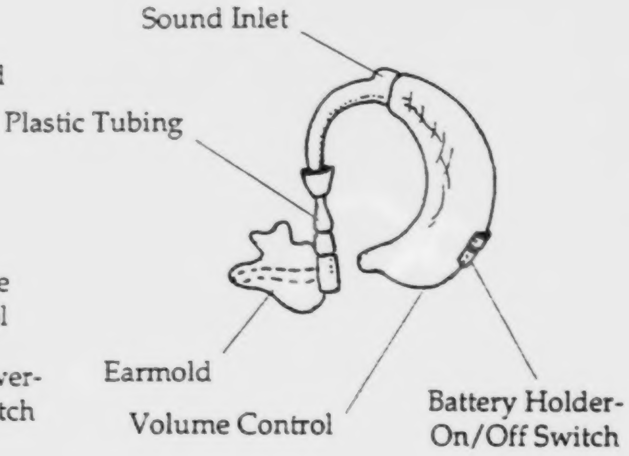
Those items that you rated 3 or below are the ones that you need to improve.

TYPES OF HEARING AIDS

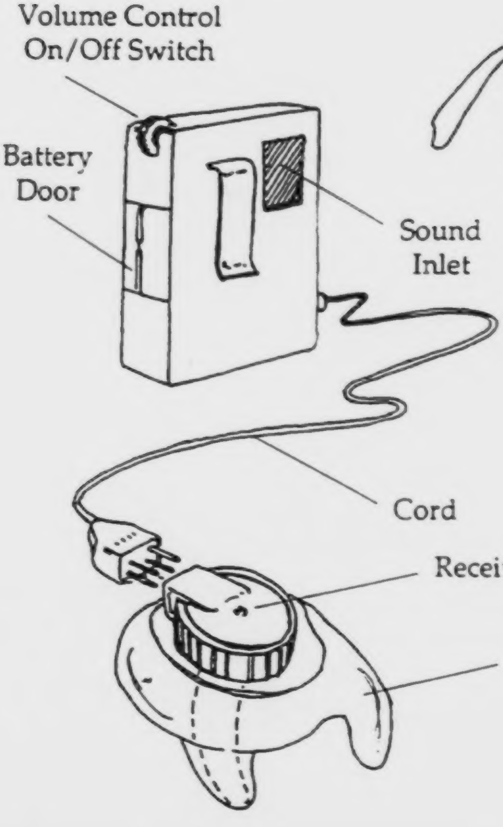
In the Ear


Sound Inlet
Earmold
Volume Control
Battery Drawer-On/Off Switch

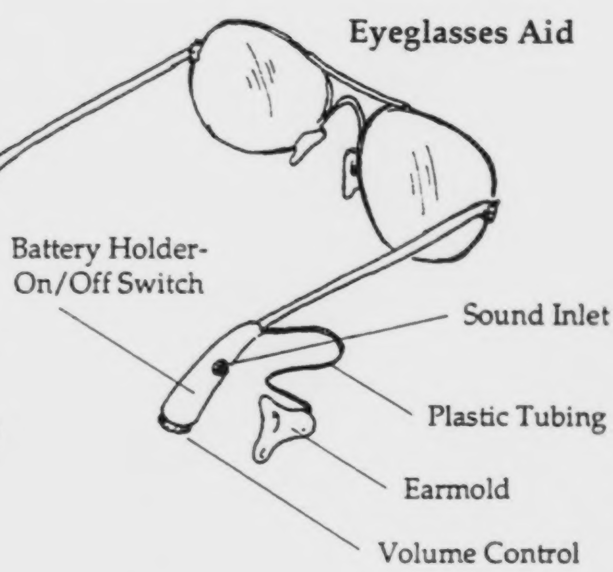
Behind the Ear


Sound Inlet
Plastic Tubing
Earmold
Volume Control
Battery Holder-On/Off Switch

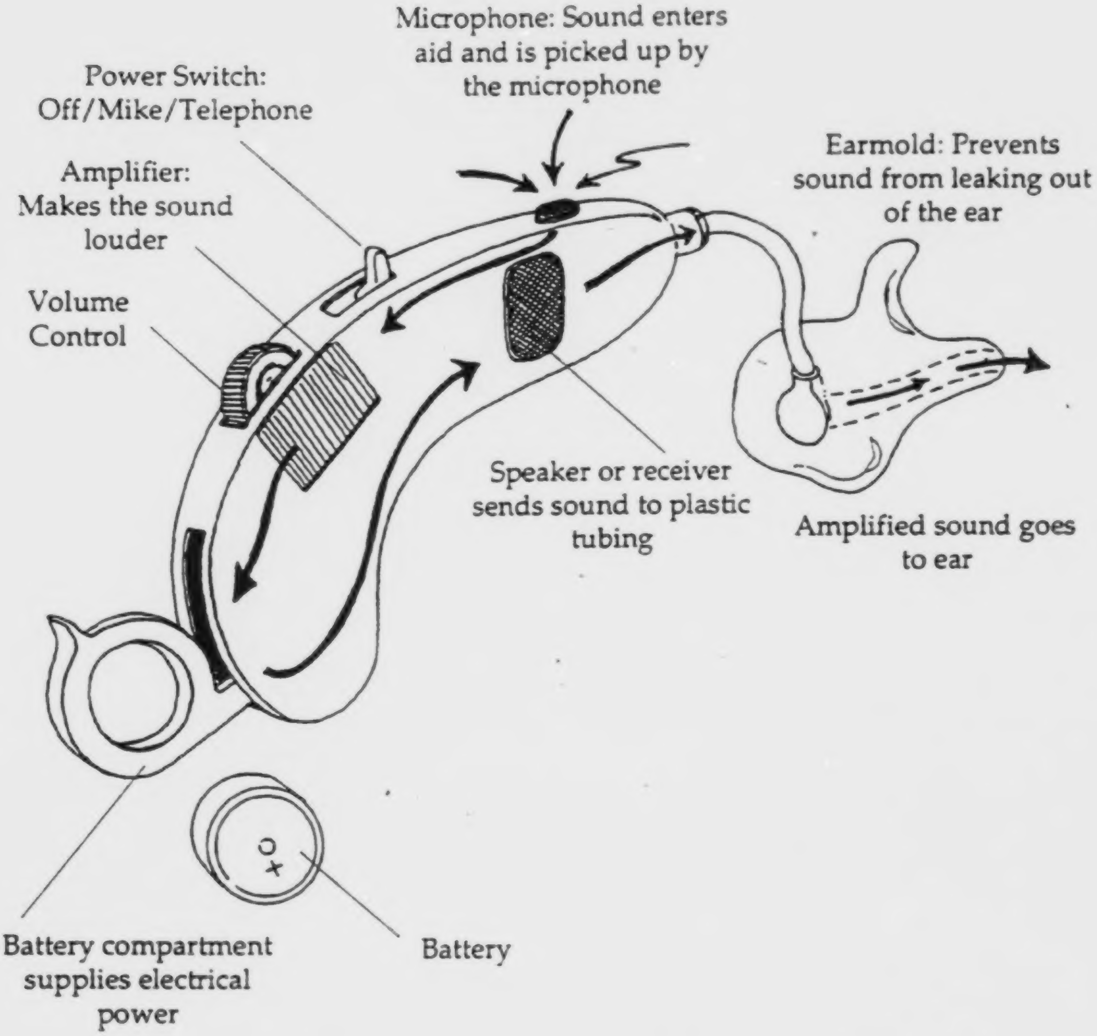
Body Aid


Volume Control On/Off Switch
Battery Door
Sound Inlet
Cord
Receiver Button
Earmold

Eyeglasses Aid


Battery Holder-On/Off Switch
Sound Inlet
Plastic Tubing
Earmold
Volume Control

OPERATION OF A HEARING AID


Microphone: Sound enters aid and is picked up by the microphone
Power Switch: Off/Mike/Telephone
Earmold: Prevents sound from leaking out of the ear
Amplifier: Makes the sound louder
Volume Control
Speaker or receiver sends sound to plastic tubing
Amplified sound goes to ear
Battery compartment supplies electrical power
Battery

COMMUNICATING WITH THE APHASIC CLIENT

Aphasia - Language difficulty, due to brain damage, which can affect listening, speaking, reading, and writing skills.

Comprehension

Simplify

1. Talk about only one idea at a time.
2. Use short sentences with simple, common words.
3. Use gestures, facial expressions, vocal inflections.

Allow Time

1. Pause between short sentences.
2. Slow down rate of speech and allow the client time to process information.

Orient Client

1. Discuss topics of interest in the client's life.
2. Orient client to people, place, and time by pointing out and discussing people and items in the environment.
3. Keep client aware of time of day via mealtimes, medications, and announcements of visitors and times they frequently come.

Confirm

Client may respond to gestures or sound of your voice without understanding you.

1. Ask client question.
2. Allow client to respond.
3. Ask client an opposite question; if client responds the same to both questions, you are not communicating.
4. Be sure you have client's attention.
5. Let client know there was a misunderstanding.
6. Speak more slowly.
7. Repeat and/or reword message.
8. Use gestures, pointing, and facial expressions. Do not speak more loudly if client did not understand you. Confusion increases with added noise and distractions, and when more than one person is talking.

Expression

Allow Time

Be patient and accepting of client's attempts to communicate.

Guess

1. Determine the subject by asking more specific questions.
2. Make statements about what you think the client means.

Alternative Communication

1. Communication board
2. Gestural system - devise own nonverbal methods - encourage pointing gestures, head nod. If you use gestures when communicating with aphasic clients, this may stimulate their use of gestures.

Verbal Communication

1. Ask questions requiring yes/no or one-word response.
2. With more verbal clients who have word-finding difficulties, encourage substitute ways of expressing meaning by asking questions like:
   "What do you use it for?"
   "Where is it?"
   "What does it look like?"
   "Why do you need it?"
3. When a client does convey what he/she wants, in a way other than verbal, say the word for him/her.

Respect

1. Speak to the client in an adult manner; she/he is usually an intelligent adult who is quite aware of her/his surroundings even though language function is impaired.
2. Include the client in the conversation; don't talk as though he/she is not there, is deaf, or is mentally retarded.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II: COMMUNICATION AND OBSERVATION SKILLS

SCOPE OF UNIT:

This unit is about how to chart accurately on the medical record; how to communicate effectively; how to make accurate observations about the clients and what to do with the information; how to use a care plan; basic telephone techniques; and measurements used in the health care field.

INFORMATION TOPIC: II-2 OR DEMONSTRATION:

CARE PLAN
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms presented in this lesson to correct definitions.
2. Describe a care plan.
3. Identify how a care plan is developed.
4. Identify goals of care plan.
5. List factors that may cause the client to be unable to meet his/her needs.
6. List ways in which the health care assistant can contribute to the care plan.
7. List four ways in which the care plan is of assistance to the health care assistant.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Organizing Your Work
2. HO 2: Overall Plan of Care - Sample
3. HO 3: Nurse Assistant Notes/Observations
4. Audiovisual available from the Missouri Division of Aging Film Library

   Understanding the Older Adult, 4 videos (TF #68), 30 min. each; and *The Interview and Mental Health Status Evaluation* booklet (TF #68B)

5. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 2 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 13.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 7, Section 3.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 4

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 2.

INTRODUCTION:

Many members of the health care team in a health care facility give some care to client. The care plan is a means of ensuring that each health care team member is aware of the long- and short-term goals for the client and how these goals are to be met.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Approach - a way or ways to reach the goal

   B. Assessment - an appraisal of the whole person to establish a baseline and determine the client's potential and his need for help

   C. Care plan - an individual plan of care for each client

   D. Data collection - the act of collecting as much information as possible

   E. Goal - the desired end result, what one hopes to accomplish

   F. Implementation - carrying out a plan of action

   G. Need - something essential or desirable that one is lacking or something one feels is lacking

   H. Nursing process - a problem-solving technique that consists of six steps: 1) data collection, 2) assessment, 3) problem identification/diagnosis, 4) planning, set goals and approaches to reach the goals, 5) implementation, and 6) evaluation

   I. Problem - needs that a client cannot meet by himself/herself

II. Description of a Care Plan (HOs 1, 2 & 3)

   A. The care plan is a plan of action for assisting the client to fulfill the basic human needs, his/her own special needs, and to successfully carry out the activities of daily living and help the client live at his/her fullest potential **(II-2)**

   B. Care plan is prepared for each client.

   C. The care plan is a form of written communication.

   D. Legally, there must be a written care plan for each client in a certified bed. For a licensed-only facility, there is no specific requirement for a care plan. All clients in an acute care facility must have a care plan.

   E. It provides a means for planning, assessing, implementing, and evaluating individual client's care.

III. Development of a Care Plan **(II-3)**

A. During a care conference, care plan is developed with input from members of the nursing and medical staff, especially the nurse assistant, and other consultants (e.g., activity director, social worker, physical therapist, occupational therapist, dietitian) as needed.

B. In the long-term care facility, the client and family are invited to participate.

C. The client's needs and strengths are discussed.

D. Team members make suggestions for meeting these needs and building on the strengths.

E. From these suggestions, the charge nurse lists the long- and short-term goals for the client and how they are to be met.

F. The long- and short-term goals and how they are to be met are then transferred to a nursing care form. This form is usually kept on a card file at the nurses' station. (Follow facility policy.)

G. The plan is always discussed with the client and is part of his/her record.

IV. Goals of a Care Plan **(II-4)**

A. To empower the client

B. To assist the client in fulfilling his/her basic human needs of:

1. Maintaining adequate nutrition
2. Eliminating waste
3. Being active (mobile)
4. Getting sufficient rest
5. Communicating with others
6. Breathing efficiently
7. Carrying out proper hygiene
8. Satisfying spiritual needs
9. Receiving emotional support

C. To assist the client in carrying out the activities of daily living - activities of daily living are activities that every person performs each day in caring for himself/herself.

V. Factors Which May Cause the Client to be Unable to Meet His/Her Needs. **(II-5)**

A. Poorly fitting dentures, digestive disorders, lack of appetite

B. Urinary catheters, constipation

C. Respiratory disease

D. Needing a walker or cane, confined to a w/c, foot problems such as bunions

E. Speaking in a different language, memory loss, hearing or vision loss, stroke, confusion

F. Unable to attend religious services

G. Anxious, depressed

H. Poor sleeping patterns, takes frequent short naps, frequently up to go to the bathroom

I. Unable to reach his/her entire body to bathe

VI. How the Care Plan Helps the Health Care Assistant **(II-6)**

A. Gives specific instructions regarding care to be given

B. Provides information needed before giving care to the client

C. Provides guidelines for the health care team to ensure continuity of care

D. Assists in organizing and planning work

VII. Role of the Health Care Assistant in Relation to the Care Plan **(II-7)**

A. Contribute to and be aware of the care plan for each assigned client.

B. Know of any changes in the care plan.

C. Follow the care plan when giving care.

D. Observe and assess the client's response to care given.

E. Report the client's response to care given.

F. When assigned, document the client's response.

VIII. Summary and Conclusion

A. Terms and definitions

B. Description of a care plan

C. Development of a care plan

D. Goals of the care plan

E. Factors which affect the client not being able to meet his/her needs

F. How the care plan helps the health care assistant

G. Role of the health care assistant in relation to the care plan

The care plan is very important to the health care assistant when planning and administering care to assigned clients. Be sure you understand and follow the policies and procedures related to the care plan in the health care facility where you are employed. The next lesson is on observation and reporting.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II: COMMUNICATION AND OBSERVATION SKILLS

INTERACTION ITEMS:

1. What are the definitions of the terms used in this lesson?
2. What is care plan?
3. How is care plan developed?
4. What are the goals of care plan?
5. What factors would prevent a client from being able to meet his/her needs?
6. How is the care plan of assistance to the health care assistant?
7. How can the health care assistant contribute to the care plan?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Show a care plan from your facility. What did it tell you about the client that you did not know?
2. How will you use what you just learned about this client as you care for him/her?
3. Discuss who contributes information to the care plan.
4. Review health care plans of clients.
5. Show audiovisuals.

ANSWERS TO EVALUATION ITEMS:

1. f
2. b
3. a
4. e
5. d
6. c
7. d
8. b
9. b

10. Any four of the following:
    a. Poorly fitting dentures, digestive disorders, lack of appetite
    b. Urinary catheters, constipation
    c. Respiratory disease
    d. Needing a walker or cane, confined to a wheelchair, foot problems such as bunions, etc.
    e. Speaking in a different language, memory loss, hearing or vision loss, stroke, confusion
    f. Unable to attend religious services
    g. Anxious, depressed
    h. Poor sleeping patterns, takes frequent short naps, frequently up to go to the bathroom
    i. Unable to reach his/her entire body to bathe

11. Any three of the following:
    a. Contribute to and be aware of the care plan for each assigned client.
    b. Know of any changes in the care plan.
    c. Follow the care plan when giving care.
    d. Observe and assess the client's response to care given.
    e. Report the client's response to care given.
    f. When assigned, document the client's response.

12. a. Gives specific instructions regarding care to be given.
    b. Provides information needed before giving care to the client.
    c. Provides guidelines for the health care team to ensure continuity of care.
    d. Assists in organizing and planning work.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

EVALUATION ITEMS:

Match the following terms to correct definitions by writing the letter in the blank.

___ 1. Goal

___ 2. Implementation

___ 3. Need

___ 4. Care plan

___ 5. Problem

___ 6. Assessment

a. Something essential or desirable that one is lacking or something one feels is lacking

b. Carrying out a plan of action

c. The act of collecting as much information as possible

d. Need that a client cannot meet by himself/herself

e. An individual plan of nursing care for each client

f. The desired end result; what one hopes to accomplish

7. Care plan is described as __________. (Circle the letter of the best answer.)

   a. A plan of action for a few clients who have special problems
   b. A form of verbal communication
   c. A plan of action developed only by the client and family
   d. A plan of action for all clients to fulfill their basic human needs and activities of daily living

8. As a health care assistant, you know the care plan is developed __________. (Circle the letter of the best answer.)

   a. By only the physician and other medical staff
   b. By members of the nursing and medical staff and other consultants as needed
   c. By only the physician
   d. By only the client and his/her family

9. Goals of care plan are to _________. (Circle the letter of the best answer.)

   a. Allow the client's family to make all decisions concerning care given
   b. Assist the client in fulfilling basic human needs and activities of daily living
   c. Tell the physician and medical staff what the client's needs are
   d. Provide a plan that only the health care assistant will know what has to be done for the client

10. List four factors which affect the client not being able to meet his/her needs.

    a.

    b.

    c.

    d.

11. List three ways in which the health care assistant can contribute to the care plan.

    a.

    b.

    c.

12. List four ways in which the care plan assists the health care assistant.

    a.

    b.

    c.

    d.

ORGANIZING YOUR WORK

Steps that will assist the health care assistant to organize the daily client care

1. Review your assignment.
   Is it specific?
   Do you have any other questions?

2. Listen to the report from the previous shift.
   Have any of the clients' conditions changed?

3. Visit all of the clients assigned to you.
   Greet clients with a smile.
   Introduce yourself by name and let the clients know that you will be their caregiver.

4. Listen to the clients and be a detective.
   What do you see, hear, smell, and feel?
   Trust your intuition. Be AWARE of verbal and non-verbal behaviors.

5. Identify the client's needs.
   Does client need assistance to bathroom, fresh water, or change of position?

6. Budget your time wisely.
   Which tasks are the most urgent? (First things first.)

Example of a form that can be used when making rounds

Observation Form			
Client's Name:			
Date	Time	Observation	Client's Need
Health care assistant may share observations and incorporate into shift care.			

HO 2

OVERALL PLAN OF CARE - SAMPLE

Personal Care:

BATH
Bathe M.W. Sat.
Partial P.r.n.
Self
Tub
Shower
Assist

MOUTH CARE
Nurse ✓
Self
Dentures ✓
Special

HAIR CARE
Shampoo bed
When 1/11
Nurse ✓
Self
Beauty Shop

SKIN CARE
Decubiti
Turning q̄ 2h
6-8-10-2-4
Dry
Shave
When

HAND/FOOT CARE
Manicure 1/12
Pedicure 1/12
Clean Nails Daily ✓
Self
Footboard ✓

(chair scale)
Weight q̄ tues.
Height
T.P.R. daily
B.P. daily
I & O to 2500 c.c.
C & A

Long Term Goal: To be independent in A.D.L. by July 15

Date	Needs: Problems or Strengths	Short Term Goals	Plan of Action	Service Responsible	Review Date and Signature	Goal Met YES	Goal Met NO	Analysis: Why Goal Not Made
1/12/93	Totally dependent in A.D.L.	will turn self In bed unaided by 2/10	Reposition q̄ 2h	Nursing				
			Teach how to assist	P.T.				
		Will assist in feeding self by 1/24	R.O.M. x 10 t.i.d. Position sitting in chair for meals	Nursing Dietary				
			Provide adaptive aids Teach to use	O.T.				
	Incontinent — admitted with catheter.	Will remove catheter by 1/17	Push fluids 2500 c.c. daily Clamp catheter 15 min. of every hour.					

Diagnosis: C.V.A. / Rt. hemiplegia
Next of Kin: John J. Doe 314-654-2310
Name: Doe, Mrs. Martha Jane
Doctor: Ari Stotle
Room: 101
Age: 73
Religion: Protestant
Admission Date: 1/10/93

BEST COPY AVAILABLE

Special Procedures:

Foley Catheter
Clamp 55 min., q̄ hour
open drainage 9 p.m.-7 a.m.
no irrigation unless
problems with drainage.

Medications:

Inderol 10 mg. q.i.d.
Librium 5 mg. b.i.d.
Lasix 10 mg. q̄.d, p.r.n. for edema
Colace cap i h.s., p.r.n. for constipation
Pyridium tab i t.i.d. x 14 days

Prosthesis:
Dentures: ✓
Full ✓
Partial
Upper
Lower
Glasses: ✓
Contacts:
Hearing Aid:
Artificial Arm:
Leg:
Eye:
Other:

P.T.

R.O.M. x 10 all extremities t.i.d. (by P.T. o.d., Nurse Assistant b.i.d. in room.)

O.T.

Teach to use adaptive eating utensil in G-chair located in Special Dining Room.

Speech/Audiology:

Therapy 3x week
(Mon., Wed., Fri.,
@ 10:30 a.m.)
To Speech Therapist's office via w/c

Diet: 2 Grm Sodium Restricted
Feed: ✓
Assist:

Self-Help Devices: Weighted Spoon with extended handle.

Breakfast	Med A.M.	Dinner	Med P.M.	Supper	H.S.

Dislikes/Allergies: Salads
Milk

Activities:
Group:

Individual: Activities Director - read letter and hometown newspaper, provide environmental stimulation.

BEST COPY AVAILABLE

HO 3

NURSE ASSISTANT NOTES/OBSERVATIONS

Room number:	Activity:	Dentures:	Nap:
	Bath:	Glasses:	Turn:
Name:	B&B:	Hearing Aid:	Transfer:
	Oral Care:	Nail Care:	Shampoo:
Catheter & Peri Care:		Meals:	Walk Aid:
Active Range of Motion:		Passive Range of Motion:	
Short-term Goals:	Intake/FF: (amount) Output: (amount)	T: _______, _____ R: _______ P: _______ Loc. _______ Reg. or Irr. BP: _________ L or R, position _________	
Notes:			

Room number:	Activity:	Dentures:	Nap:
	Bath:	Glasses:	Turn:
Name:	B&B:	Hearing Aid:	Transfer:
	Oral Care:	Nail Care:	Shampoo:
Catheter & Peri Care:		Meals:	Walk Aid:
Active Range of Motion:		Passive Range of Motion:	
Short-term Goals:	Intake/FF: (amount) Output: (amount)	T: _______, _____ R: _______ P: _______ Loc. _______ Reg. or Irr. BP: _________ L or R, position _________	
Notes:			

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II: COMMUNICATION AND OBSERVATION SKILLS

SCOPE OF UNIT:

This unit is about how to chart accurately on the medical record; how to communicate effectively; how to make accurate observations about the clients and what to do with the information; how to use a care plan; basic telephone techniques; and measurements used in the health care field.

INFORMATION TOPIC: II-3 OR DEMONSTRATION:

OBSERVATION AND REPORTING

(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms presented in this lesson to correct definitions.
2. List five methods of observation.
3. Identify changes in client's usual appearance and behavior that are to be reported.
4. Identify guidelines for reporting observations of status change in clients to charge personnel.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Observations to Report to the Instructor/Staff Personnel
2. HO 2: Intervention Through Observation
3. Television and VCR
4. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *Working with Older People*, video (TF #46) 60 min.
    b. *As the River Flows...Medications and the Elderly: Physiological Changes and Dosing*, video (TF #156), 15 min.

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 3 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapters 10, 19, 29.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 7, Section 3.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 4, Section 3.

INTRODUCTION:

Making useful observations gives the health care assistant satisfaction and a feeling of achievement; but more important than that, it can provide nurses and physicians with important information for proper care of the client. Observation techniques must be practiced each day and require the use of all of one's senses. Get in the habit of observing your client any time you are with him/her. Check your client from head to toe each day. It is a good idea to carry a pad of paper and pen in your pocket to record observations so you will not forget to report and document them.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Abrasion - a scraping or rubbing off of the skin

   B. Afebrile - without fever

   C. Anterior - toward the front

   D. Constipation - difficult or infrequent movement of the bowels

   E. Constrict - get smaller

   F. Contusion - an injury that does not break the skin, caused by a blow to the body and characterized by swelling, discoloration, and pain

   G. Cyanotic - a bluish-gray color of the skin, lips, or nail beds due to lack of oxygen

   H. Dilate - to get larger

   I. Disorientation - state of mental confusion or loss of bearings (sense of time, place, or identity)

   J. Distention - state of being inflated, enlarged, or stretched out

   K. Dysphagia - difficulty swallowing

   L. Dyspnea - difficulty in breathing

   M. Edema - swelling due to an accumulation of watery fluid in the tissue

   N. Emesis - vomiting

   O. Febrile - feverish

   P. Feces - waste products of digested food discharged from the intestine (stool, BM)

   Q. Fever - elevation of body temperature above normal

   R. Flatus - gas

   S. Flushed - reddened color of the skin

T. Incontinent - inability to control evacuation of one's bowels or bladder or both

U. Inflammation - reaction of tissue to injury of any kind

V. Jaundice - yellow discoloration of skin due to bile

W. Laceration - wound produced by cutting or tearing

X. Mucus - sticky substance secreted by mucous membranes mainly in the lungs, nose, and parts of the rectal and genital areas

Y. Pallor - paleness

Z. Posterior - towards the back

AA. Projectile vomiting - vomitus forcibly ejected without nausea

AB. Pus - thick yellowish secretion formed in certain kinds of inflammation

AC. Void - to pass urine

II. Five Methods of Observation - you have used your senses for observation all of your life but may have never realized it **(II-2)**

A. Seeing

1. Look and think about what you are seeing and what it means.

2. Observe for skin rash, reddened areas, edema, etc.

B. Hearing

1. Listen to a sound and try to understand what it means.

2. Listen for a cough or wheezing sound when the client breathes.

3. Some changes can be felt and described only by the client - pain, nausea, dizziness, a ringing in the ears, or headache. Listen for verbal signs from the client.

C. Smelling - smell the odor of a discharge or the client's breath

D. Touching

1. You can feel signs with your fingers.

2. You may note if the skin is hot or cold and wet or dry or if there are changes in the pulse rate.

E. Vital signs - a change can indicate many things; anything not within normal range may be significant and should be reported

III. Things to Observe (HOs 1 & 2) **(II-3)**

A. Activities of daily living (independent/dependent)

1. Dressing - untidy, unclean, or neat, clean
2. Grooming - untidy or neat
3. Walking
    a. Gait steady or unsteady; shuffling
    b. Difficulty getting up and out of bed
4. Eating and drinking
    a. Good appetite or no appetite
    b. Dislikes diet or tries some of each food
    c. Amount eaten or type and amount not eaten
    d. Dysphagia or difficulty swallowing
    e. Thirsty or seldom drinks water
5. Elimination
    a. How often does client void?
    b. Note color, odor, amount, and clarity (clearness) of urine.
    c. Is voiding hard to start or is there pain during urination?
    d. Is the client incontinent of urine?
    e. Is the catheter in place and draining properly?
    f. How often does a client have a bowel movement?
    g. Note color, odor, amount, and consistency (liquid, loose, hard) of stool.
    h. Note blood, clumps of mucus, clay color, or if feces looks like black tar.
6. Sleeping
    a. Able to sleep or restless
    b. Sleeps more than normal, constantly asleep

        c. Lies still or tosses around
        d. Complains about not being able to sleep (compare with your observation)

B. Mental condition or mood **(II-4)**

    1. Level of orientation--who, what, where
    2. Talkative or not talkative
    3. Talking sensibly or not making sense
    4. Anxious and worried or very calm
    5. Speaking rapidly or slowly
    6. Cooperative or not cooperative
    7. Client is irritable, depressed, hostile, combative
    8. Delirium - Continuous or intermittent; rambling of ideas or one persistent idea
    9. Coma or unconscious, failure to respond to verbal commands or stimuli
    10. Crying - fretful, sharp, whining, or moaning; give reason if known

C. Position

    1. Time of position change; what position client is put in
    2. Able to move easily or requires assistance of two or three staff members

D. Skin

    1. Color - pallor, flushed, cyanotic, jaundiced
    2. Dry or moist
    3. Warm (hot) or cool (cold)
    4. Edema - location, general or local, any color changes
    5. Reddened areas - location, open, size, drainage
    6. Rash, hives, itching, bruises, abrasions, lacerations

E. Eyes, ears, nose, and mouth

1. Eyelids inflamed; watery eyes; bloodshot appearance or yellowish cast to the whites of the eyes
2. Bothered by bright light; twitching
3. Pupils - constricted or dilated; unequal or equal in size
4. Eyes appear to be fixed; constant involuntary movement
5. Ability to hear you
6. Difficulty breathing through his/her nose
7. Mucus discharge from the nose
8. Mouth - lost or broken dentures, sores, tenderness, bleeding gums
9. Complaint of a bad taste in the mouth; odor of breath - foul (halitosis), sweet or fruity, alcohol

F. Breathing

1. Noises when he/she breathes; wheezing; moist sounding
2. Dyspnea; difficult or labored breathing usually accompanied by pain
3. Cough - productive (note amount, color, and consistency of sputum) or dry; tight hacking, painful

G. Abdomen

1. Stomach puffy, distended, hard, rigid, tender
2. Gassiness, belching, hiccups
3. Nausea
4. Emesis - self-induced; projectile; note color, consistency, and amount

H. Movements

1. Shaking - tremor
2. Jerky - spasm
3. Limp

I. Pain

1. Location

2. Duration (How long has he/she had pain?)

3. Description of pain - constant, comes and goes; sharp, dull; aching, knifelike

4. If client has taken pain medication, has the medication relieved the pain?

J. Vital signs

1. Temperature - febrile or afebrile

2. Pulse - rhythm--regular or irregular; rate--too fast or too slow; force--strong or weak

3. Respiration

a. Rhythm - regular or irregular; rate-too fast or too slow; shallow

b. Cheyne-Stokes - uneven rhythm and rate and periods of no breathing

c. Noisy breathing - normal breathing cannot be heard

4. Blood pressure - strong (easy to hear) or weak (difficult to hear)

K. Each client's unit

1. Check that all equipment is working. Make sure there are no frayed electrical cords.

2. Make sure the call signal is where the client can easily reach it.

3. Articles on the bedside table must be within easy reach for the client.

L. Other

1. Convulsions - time, duration, intermittent or continuous; mild or violent; generalized or limited to one part of the body

2. Chills - time and duration, severity of chill; temperature at time chill is completed, temperature 30 minutes after chill is completed

3. Accidents or incidents - time, witnesses, observations of injury, and cause of suspected injury

4. Discharges - unusual body discharge; location and type (bloody, mucus, pus, or clear)

IV. Guidelines for Reporting Observations of Status Change **(II-5)**

A. Observe for the unusual, then report only what you observe. Be objective, do not make judgments or try to diagnose.

B. Note the time, the name of the client, location of any abnormal signs, location of client in facility, any symptoms the client mentions, and report to the charge nurse as soon as possible.

VI. Summary and Conclusion

A. Terms and definitions

B. Five methods of observation

C. Things to observe

D. Guidelines for reporting observations of status change

Making observations is one of the most important functions of your job as a health care assistant. Always be alert for changes and abnormalities of the condition of each of your clients. Become familiar with the terminology that has been included in this lesson. The next lesson is on charting on medical records.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

INTERACTION ITEMS:

1. What are the definitions of the terms used in this lesson?
2. What methods might you use to observe the client?
3. What observations should you make about the way your client appears to you?
4. What observations should you make with regard to your client's behavior?
5. What guidelines should the health care assistant use for reporting observations?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Write a short paragraph about another classmate or a client after observing him or her for a few minutes (use all observation methods, if applicable).
2. Show video.
3. Go to clinical area--observe edema, lung congestion, reddened areas, etc.
4. Play act giving an oral report.
5. Have students role play the following situations. One appropriate response has been included for each.

    a. Mrs. Smith yells at you as you enter her room, "Hurry up and get me dressed. What's wrong with you? Can't you see that I need to be helped first?" The tone of her voice is sharp and impatient. As you are assisting Mrs. Smith to the W/C you note a sweet, fruity odor on her breath; she has a skin tear that is oozing blood on her right forearm; and her face is flushed and very warm. What observations can you make?

       Observations: 1. The tone of the client's voice; 2. Sweet, fruity odor on her breath; 3. Skin tear that is oozing blood--right forearm; 4. Flushed and warm face. Report all of these things immediately to the charge nurse.

b. You are in the dining room at noon. Mrs. Mabel Howell, a client, is sitting next to the client you are feeding. She keeps repeating "I'm so sick," she appears pale--all of a sudden she grabs her chest and starts crying out with pain. The CMT comes over and starts to check her vital signs and asks you to go get the nurse. What will you tell the nurse?

Observations: Mrs. Mabel Howell is sitting in the dining room. She is pale and stated "I'm so sick." She grabbed her chest and started crying out loud. The CMT is checking her vital signs now.

ANSWERS TO EVALUATION ITEMS:

1. j
2. a
3. i
4. k
5. d
6. c
7. g
8. b
9. f
10. l
11. h
12. e
13. b
14. c
15. j
16. e
17. d
18. g
19. h
20. k
21. i
22. l
23. f
24. a
25. m

26. a. Location
    b. Duration
    c. Description of pain
    d. If the client has taken pain medication

27. a. Seeing
    b. Hearing
    c. Smelling
    d. Touching
    e. Vital signs

28. c
29. b
30. c

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

EVALUATION ITEMS:

Match the following terms to correct definitions by writing the letter in the blank.

___ 1. Cyanotic
___ 2. Void
___ 3. Flatus
___ 4. Febrile
___ 5. Constrict
___ 6. Jaundice
___ 7. Mucus
___ 8. Dysphagia
___ 9. Laceration
___ 10. Abrasion
___ 11. Contusion
___ 12. Dyspnea

a. To pass urine
b. Difficulty swallowing
c. Yellow discoloration of skin
d. Get smaller
e. Difficulty in breathing
f. Wound produced by cutting or tearing
g. Sticky substance secreted by mucous membranes, mainly in the lungs, nose, and parts of the rectal and genital areas
h. An injury that does not break the skin, characterized by swelling, discoloration, and pain
i. Gas
j. A bluish-gray color of the lips, skin, or nail beds
k. Feverish
l. Scraping or rubbing off of the skin

Match the following terms to correct definitions by writing the letter in the blank.

___ 13. Flushed
___ 14. Pus
___ 15. Distention
___ 16. Dilate
___ 17. Feces
___ 18. Projectile
___ 19. Edema
___ 20. Constipation
___ 21. Incontinent
___ 22. Pallor
___ 23. Inflammation
___ 24. Disorientation
___ 25. Emesis

a. State of mental confusion or loss of bearings (sense of time, place, or identity)
b. Reddened color of the skin
c. Thick, yellowish secretion formed in certain kinds of inflammation
d. Waste products of digested food discharged from the intestine
e. To get larger
f. Reaction of tissue to injury of any kind
g. Vomiting forcibly ejected without nausea
h. Swelling due to accumulation of watery fluid in the tissue
i. Inability to control one's bowels or bladder or both
j. State of being inflated, enlarged, or stretched out
k. Difficult or infrequent movement of bowels
l. Paleness
m. Vomiting

26. List four observations that should be made if a client complains of pain.

a.
b.
c.
d.

27. List the five methods of observation.

a.
b.
c.
d.
e.

28. Which of the following is not a guideline for reporting observations in status change? (Circle the letter of the best answer.)

    a. Report only what you observe.
    b. Don't make judgments; be objective.
    c. Report your own personal feelings during incidents.
    d. Always note the locations of any abnormal signs and symptoms that the client tells you.

29. You are assigned to care for Mrs. White, a client in the home where you are employed. Which of the following observations would you identify as a change in Mrs. White's behavior? (Circle the letter of the best answer.)

    a. Mrs. White is unusually talkative during her bath.
    b. Mrs. White appears to be sleeping more than usual.
    c. Mrs. White refuses to eat liver for lunch.
    d. Mrs. White appears worried about her sick daughter.

30. When would you report Mrs. White's change of condition to the charge nurse? (Circle the letter of the best answer.)

    a. At shift change report
    b. One hour after observation to see if she improves
    c. As soon as possible after making the observation
    d. Tomorrow when the regular charge nurse is on duty

OBSERVATIONS TO REPORT TO THE INSTRUCTOR/STAFF PERSONNEL

Observe closely and accurately, and report promptly:

1. All symptoms - noted by the client or observed but for which no complaint is voiced
2. Change in vital signs - temperature, pulse, respirations, and blood pressure
3. Change in personality - weak, depressed, apathetic, apprehensive, or hysterical
4. Change in skin color - sudden pallor, yellowish flushing, cyanosis, or blotching
5. Change in respiration - difficult breathing (dyspnea), rapid respirations, gasping, inability to breathe except when sitting or standing erect, or painful breathing
6. Breath - unpleasant, foul, sweet or fruity odor, or smell of alcohol
7. Cough - exhausting, harsh, tight, dry, hacking, painful or wheezing; if productive, report quantity, color (rusty, green, bloody), thick or mucoid
8. Dizziness - any loss of balance, complaint of dizziness, or faintness
9. Nausea or vomiting - self-induced by client, projectile (with force projection), color (bloody, coffee ground color, greenish), and consistency (liquid or undigested food)
10. Convulsions - time, duration, intermittent or continuous, mild or violent, and generalized or limited to one part of the body
11. Delirium - continuous or intermittent, rambling of ideas or one persistent idea, coma or unconsciousness, failure to respond
12. Chills - time and duration, severity of chill (violent or shivering), temperature at time chill is completed, and temperature 30 minutes after chill is completed
13. Crying - fretful, sharp, whining, or moaning; give reason if known
14. Discharges - unusual body discharge, location, and type (bloody, mucus, pus, or clear)
15. Swelling (edema) - generalized or local (as legs and feet), color change accompanying swelling
16. Skin conditions - dryness, scales, rash, hives, blotching, boils, itching, reddened areas, bruises, abrasions, bedsores, open raw areas
17. Abdomen - distended, hard, rigid, painful, tender

18. Eyes - bloodshot, dull, yellowish color, anxious, inflamed, watery and tearing, sensitive to light, twitching, pupils contracted, dilated, or unequal, constant involuntary movement of eyeballs, fixed look

19. Appetite - loss of appetite, failure to eat a meal (may be diabetic), eating of additional foods while on restricted diet, any difficulty the client may have swallowing, chewing or feeding himself/herself

20. Accidents or incidents - time, names of witnesses, observations of injury, and cause or suspected cause of bruises and abrasions

21. Sleep - moaning, restless, inability to sleep, short interval sleeping

22. Oral hygiene - lost or broken dentures or bridgework, mouth sores, tenderness, bleeding gums

23. Physical activities - failure of ambulatory client to get out of bed or refusal to walk or exercise

24. Bowel - diarrhea, stool of unusual color (clay or black with blood), hard-formed stool, failure to defecate, any variation from normal established bowel habits

25. Urine - unusual odor, color, cloudy, or bloody; change in output or failure to void, catheter drainage system not open or draining an inadequate amount of urine

26. Bath - failure to give bath or refusal of client to receive bath or other routine nursing service for which you are responsible

27. Personality change - irritable, depressed, anxious, hostile, combative, inappropriate laughter or crying, withdrawn

INTERVENTION THROUGH OBSERVATION

1. When the client attempts to play on your feelings and turns the conversation back to you, remain objective and gently remind him/her that you were talking about him/her.

2. When the client feels a need to do something "right" and/or is slow and methodical, you can help by rearranging the schedule to allow more time for projects and to cut down on interruptions.

3. When the client is distrustful, speak clearly to reduce misunderstandings and create a feeling of acceptance.

4. When the client seems lonely, demanding or picky, you can help by arranging for someone to spend time with that person.

5. When a client is domineering, inappropriately loving, or changes emotions rapidly, remain calm, unhurried, and avoid arguments with him/her.

6. When a client is uncertain and can't bear criticism, assist him/her to verbalize his/her feelings.

7. When the client is skeptical, resentful, and/or sarcastic, remain calm, unhurried, and self-assured.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II: COMMUNICATION AND OBSERVATION SKILLS

SCOPE OF UNIT:

This unit is about how to chart accurately on the medical record; how to communicate effectively; how to make accurate observations about the clients and what to do with the information; how to use a care plan; basic telephone techniques; and measurements used in the health care field.

INFORMATION TOPIC: II-4 OR DEMONSTRATION:

CHARTING ON MEDICAL RECORDS

(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms to correct definitions.
2. Describe the three elements necessary to formulate words.
3. Match common abbreviations and symbols with correct terms.
4. Chart observations using basic guidelines.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Glossary of Word Elements
2. HO 2: Keys to Good Charting
3. HO 3: Check Charting Form
4. HO 4: Narrative Charting
5. Pen
6. Charting Paper
7. Blackboard
8. Dictionary
9. Television and VCR

10. *The Client Record: A Tool for Optimizing Quality Care and Malpractice Prevention*, video (TF #119), 59 min., available from the Missouri Division of Aging Film Library

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 4 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 11.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 7, Section 3.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 4, Section 3.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 6.

INTRODUCTION:

In health care facilities there is a need for accurate descriptions of the care given to clients and the conditions that exist throughout a client's stay. The progress notes must communicate clearly and efficiently with government agencies, health care professionals, and the consumer. We will discuss how to record effective, accurate descriptions of care given and observations made of your assigned client. How much you will need to record depends upon the facility's policy where you are employed. Always check the health care facility policy manual for approved abbreviations at that facility.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II: COMMUNICATION AND OBSERVATION SKILLS

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Ambulatory - able to walk

   B. Care plan - a written guide that gives directions about the care a client must receive

   C. Chart - the client's record

   D. Kardex - a card file with a summary of information found in the client's chart

   E. Objective data - information and symptoms that the health care assistant can see, hear, feel, and smell

   F. Observation - collection of information about the client by seeing, hearing, touching, and smelling

   G. Recording - charting of our observations on the client's charts

   H. Reporting - verbal report of care and observations to another nurse

   I. Signs - objective data

   J. Subjective data - signs and symptoms that cannot be observed by seeing, hearing, touching, and smelling; that which is reported by the client

   K. Urinary catheter - a sterile tube inserted into the bladder to drain urine

II. Word Elements (HO 1)

   A. Root - body or main part of the word

   B. Prefix - word element added to the beginning of a root which changes or adds to the meaning of a root

   C. Suffix - word element added at the end of a root which changes or adds to the meaning of a root

   D. Formulation of words

      1. Prefix with root

        2. Root with suffix

        3. Root with root

        4. Prefix with suffix

III. Abbreviations and Symbols **(II-2)**

    A. Activities of daily living (ADL)

        1. ad lib - as desired

        2. amb. - ambulatory

        3. BM - bowel movement

        4. BRP - bathroom privileges

        5. BSC - bedside commode

        6. cath. - catheter

        7. G/C - geri-chair

        8. H.O.B. - head of bed

        9. R.O. - reality orientation

        10. R.O.M. or ROM - range of motion

        11. SOB - shortness of breath

        12. W/C or w/c - wheelchair

    B. Food and fluids

        1. ac or a.c. - before meals

        2. amt. - amount

        3. cc - cubic centimeter

        4. FF - frequent fluids

        5. H_2O - water

        6. I & O - intake and output

        7. IV - intravenously

        8. liq. - liquid

9. NPO - nothing by mouth
10. pc or p.c. - after meals
11. PO or p.o. - by mouth
12. s̄s̄ - one half

C. Vital signs

1. VS pr v.s. - vital signs
2. BP - blood pressure
3. ht - height
4. TPR - temperature, pulse, respiration
5. wt - weight

D. Time and frequency

1. a.m. or A.M. - morning
2. bid or b.i.d. - twice a day
3. hr - hour
4. hs - hour of sleep; bedtime
5. od - daily
6. p.m. or P.M. - afternoon
7. prn - whenever necessary
8. q - every
9. qid - four times a day
10. tid or t.i.d. - three times a day
11. qd - every day

E. Miscellaneous

1. ā - before
2. B&B - bowel and bladder
3. c̄ - with

4. c/o or C/O - complains of
5. O_2 - oxygen
6. p̄ - after
7. s̄ - without
8. Sol - solution
9. OS - left eye
10. OD - right eye
11. OU - both eyes

IV. Charting **(II-3)**

A. Purpose

1. To communicate with other members of the health care team
    a. Physician's orders are written based on the needs of the client.
    b. Care plan (needs are identified)
    c. Progress notes
2. Legal document describing the delivery of care to meet needs of the client
3. Legal document to provide evidence to regulatory agencies that care has been provided as ordered and requirements for licensure and certification are met
4. To document for insurance purposes and/or legal actions

B. Charting responsibilities

1. Monthly summary done by licensed or charge personnel in long-term care facilities
2. Every shift done by licensed personnel in acute care facilities
3. Daily care routines (bathing, B&B, turning, etc.) charted by personnel completing task
4. Progress notes charted by allied personnel, for example PT, OT

C. Basic rules (HO 2)

1. Notes must be precise and exact. Report and record in an objective way, not subjective.

   Example: Subjective - Mrs. Smith fell on the floor.

   Objective - Found Mrs. Smith seated on floor beside bed.

2. Do not skip lines.

3. Use only approved abbreviations (see facility's policy).

4. Never erase. If you make a mistake, draw a line through the error; write "error"; and write your initials by it for identification. Use a ball-point ink pen, which is color-coded by the facility.

5. Use simple, correct terminology. Use correct grammar, spelling, and punctuation (refer to a dictionary).

6. Use direct quotes when describing an emotional statement.

   Example: Mrs. Jones stated, "I am so depressed today."

7. Indicate number of times an event occurs during a shift, day, week, etc.

8. Make follow-up notations of results of actions relative to the care plan.

9. If facility's policy allows, read notations by other personnel.

10. Record client's reactions to family and visitors.

11. Never chart a procedure before it has been performed.

12. All charting is done in ink with a ball-point pen. Do not use felt-tipped pens.

13. Always record date and time.

14. Second-hand information which is reported should be recorded as such (information that was told to you by the client's roommate for example). Do not chart it as your own first-hand observation; describe situation and name of individual who you received information from.

15. Always sign your name with first initial, last name, and job title, for example, M. Smith, CNA; J. Romero, PTA.

16. Printing or writing must be legible.

D. Variations in charting

  1. Check chart (HO 3)

    a. Check the appropriate square

    b. Check the appropriate description of action

  2. Narrative nurse's notes (nurse's progress notes) written out in sentence form; should cover the following information:

    a. Mobility and balance

    b. Diet and eating habits

    c. Bathing, dressing, and grooming

    d. Elimination

    e. Speech, hearing, and sight

    f. Behavior and mental condition

    g. Restorative nursing procedures

    h. Dentition (condition of teeth) and oral hygiene

    i. Comfort measures

    j. Spiritual needs

    k. Sleeping patterns

    l. Any other problems identified

V. Summary and Conclusion

  A. Terms and definitions

  B. Word elements

  C. Abbreviations and symbols

  D. Charting

Accurate documentation of the care given to a client is important to prove that the expected care was given. It should be brief but descriptive. Decisions affecting care can be made on the basis of what is recorded on the chart. Always think before you write. The next lesson is on basic telephone techniques.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

INTERACTION ITEMS:

1. What are the definitions of terms presented in this lesson?
2. What are the three elements necessary for forming words?
3. What do the following abbreviations and symbols mean: pc, qid, TPR, R.O.M., ā, cc, amb, BM, R.O., q, O_2, tid, hs, B&B, c̄, ad lib, NPO, BRP, HOB, and SOB?
4. What are the basic rules of charting?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Prepare flash cards for "Abbreviation Bee."
2. Divide class into two groups for "Abbreviation Bee."
3. Fill out check charting form (HO 3 or facility's form) using information given by the instructor.
4. Discuss with the class the importance of not erasing while charting.
5. Discuss keys to good charting (HO 2).
6. Show audiovisuals.
7. Review facility's forms and guidelines for completing forms.

ANSWERS TO EVALUATION ITEMS:

1. e
2. f
3. b
4. g
5. a
6. c
7. c
8. e
9. g
10. f
11. a
12. b

13. a
14. g
15. d
16. a
17. b
18. c
19. f
20. c
21. f
22. g
23. e
24. a
25. d
26. d
27. a
28. g
29. b
30. f
31. c
32. Weight before breakfast without shoes
33. Nothing by mouth at bedtime for blood test in the morning
34. Bed rest with bathroom privileges; head of bed may be raised because of shortness of breath
35. Apply lotion twice a day whenever necessary for itching
36. d
37. c
38. d

39.

Nurse's Notes

LAST NAME FIRST NAME	ATTENDING PHYSICIAN:	ROOM NO.:	HOSPITAL NO.:
Chase, Mrs. Polly	*Hypo Crates, M.D.*	*100-1*	*77-334522*

DATE:	Notes should be signed by Physician.
11-23-93	*7-11 a.m. ate 90% breakfast. Partial bath given. Out of bed while bed*
	made. Seen by Dr. Hypo Crates. c/o headache; reported to charge
	nurse. To x-ray by W/C--S. Jones, CNA

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

EVALUATION ITEMS:

Match the following terms in Column I with the correct abbreviations and symbols in Column II.

		Column I		Column II
___	1.	Care plan	a.	Able to walk
___	2.	Chart	b.	Signs and symptoms which are reported by the client
___	3.	Subjective data	c.	A sterile tube inserted into the bladder to drain urine
___	4.	Objective data	d.	A card file with a summary of information about the client
___	5.	Ambulatory		
___	6.	Urinary catheter	e.	A written guide that gives directions about care which the client is to receive
			f.	The client's record
			g.	Information and symptoms that can be seen, heard, felt, and smelled

Match the following terms in Column I with the correct abbreviations and symbols in Column II.

		Column I		Column II
____	7.	Ambulatory	a.	Cath
____	8.	Head of bed	b.	W/C
____	9.	Bathroom privileges	c.	amb.
____	10.	Range of motion	d.	SOB
____	11.	Catheter	e.	H.O.B.
____	12.	Wheelchair	f.	R.O.M.
			g.	BRP

13. Elements necessary for forming words are: (Circle the letter of the best answer.)

a. Prefix, suffix, and root
b. Objective data
c. Subjective data
d. Sound, spelling, and use

Match the following terms in Column I with the correct abbreviations and symbols in Column II.

		Column I		Column II
____	14.	Bowel movement	a.	ac
____	15.	Amount	b.	H_2O
____	16.	Before meals	c.	I & O
____	17.	Water	d.	amt
____	18.	Intake and output	e.	FF
____	19.	Nothing by mouth	f.	NPO
			g.	BM

Match the following terms in Column I with the correct abbreviations and symbols in Column II.

		Column I		Column II
____	20.	After meals	a.	BP
____	21.	By mouth	b.	od
____	22.	One half	c.	pc
____	23.	Temperature, pulse, respirations	d.	bid
____	24.	Blood pressure	e.	TPR
____	25.	Twice a day	f.	PO
			g.	$\bar{s}\bar{s}$

Match the following terms in Column I with the correct abbreviations and symbols in Cclumn II.

Column I		Column II	
____ 26.	Hour of sleep; bedtime	a.	od
____ 27.	Once daily	b.	q
____ 28.	Whenever necessary	c.	s̄
____ 29.	Every	d.	hs
____ 30.	Four times a day	e.	tid
____ 31.	Without	f.	qid
		g.	prn

On the lines provided, write out what each of the following means:

32. Wt ā breakfast s̄ shoes.________________________________

33. NPO at hs for blood test in a.m.________________________________

34. Bed rest c̄ BRP, H.O.B. up for SOB________________________________

35. Apply lotion bid prn itching________________________________

36. Which of the following is the correct way for this nurse assistant to sign her name? (Circle the letter of the best answer.)

    a. Susan Metz
    b. Susan Metz, CNA
    c. S. Metz
    d. S. Metz, CNA

37. You have made an error in charting on a client's chart. Which one of the following examples below is the procedure for correcting it? (Circle the letter of the best answer.)

    a. Draw one line through it.
    b. Mark several lines through it.
    c. Draw one line through it, write the word "error," and place your initials by it.
    d. Erase the error.

38. Which of the following would not be in complete nursing notes? (Circle the letter of the best answer.)

    a. Notes must be precise and accurate.
    b. Date each notation accurately.
    c. Documentation should be related to the span of a shift.
    d. Exact hour and minutes is used to record all things.

39. Read the following situation. On the nurse's notes form below, chart according to basic guidelines.

    Polly Chase in room # 100-1 was fed breakfast at 7:00 a.m. and ate most of it. She was given a partial bath. She sat in a chair while the aide made her bed. Dr. Hypo Crates made rounds at 10:30. Mrs. Chase went to x-ray in a wheelchair at 11:00 a.m. She complained of a headache prior to going to x-ray.

<table>
<tr><th colspan="5">Nurse's Notes</th></tr>
<tr><td colspan="2">LAST NAME FIRST NAME</td><td>ATTENDING PHYSICIAN:</td><td>ROOM NO.:</td><td>HOSPITAL NO.:
77-334532</td></tr>
<tr><td>DATE:</td><td colspan="4">Notes should be signed by Physician.</td></tr>
<tr><td></td><td colspan="4"></td></tr>
<tr><td></td><td colspan="4"></td></tr>
<tr><td></td><td colspan="4"></td></tr>
<tr><td></td><td colspan="4"></td></tr>
<tr><td></td><td colspan="4"></td></tr>
</table>

GLOSSARY OF WORD ELEMENTS

Word Element	Refers to or Means
a-, an-	without, lack of, absent, deficient
ab-, abs-	from, away
ad-	near, toward
adeno	gland
alb	white
-algia, -algesia	pain
ambi-	both
angio	vessel (blood or lymph)
ante-	before
anti-	against
arterio	artery
arthro	joint
-asthenia	weakness
auto-	self
bi-	two, twice
brady-	slow
broncho	bronchus
cardio	heart
-cele	tumor, swelling, hernia, sac
-centesis	puncture
cephalo	head
chole	gall

Word Element	Refers to or Means
cholecysto	gallbaldder
chondro	cartilage
cide	kill
circum-	around
-cise	cut
colo	colon
colpo	vagina
contra-	against
costo	rib
cranio	skull
cyano	blue
cysto	urinary bladder
cyto	cell
dermo, dermato	skin
di-	two
dys-	painful, difficult, disordered
ectomy	surgical removal
-emesis	vomiting
-emia	blood
encephalo	brain
endo-	within, inner, on the inside
entero	intestine
epi-	above, over
erythro	red

Word Element	**Refers to or Means**
-esthesia	sensation
ex-	out
gastro	stomach
-gene, -genic	production, origin
gluco, glyco	sugar, sweet
-gram	record
-graph	machine
-graphy	practice, progress
gyne	woman
hema, hemo	blood
hemi-	half
hepa, hepato	liver
histo	tissue
hydro-	water
hyper-	over, above, increased, excessive
hypo-	under, beneath, decreased
hyster	uterus
inter-	between
intra-	within
-itis	inflammation of
laparo	abdomen
-lepsy	seizure, convulse
leuko	white

Word Element	Refers to or Means
lipo	fat
lith	stone, calculus
-lysis	loosen, dissolve
mal-	bad, poor, disordered
-mania	insanity
mast	breast
mega-	large
meso-	middle
-meter	measure
micro-	small
mono-	single, one
muco	mucous membrane
myelo	spinal cord, bone marrow
myo	muscle
narco	sleep
naso	nose
necro	death
neo-	new
nephro	kidney
neuro	nerve
non-	no, not
oculo	eye
-ology	study of

Word Element	Refers to or Means
-oma	tumor
oophor	ovary
ophthalmo	eye
orchi	testicle
-orrhaphy	to repair a defect
ortho-	straight
-oscopy	look into, see
osis	condition of
osteo	bone
-ostomy	surgical opening
oto	ear
otomy	incision, surgical cutting
para-	alongside of
path	disease
ped (latin)	foot
ped (greek)	child
-penia	too few
peri-	around, covering
-pexy	to sew up in position
pharyngo	throat
phlebo	vein
-phobia	fear, dread
-plasty	operative revision

Word Element	**Refers to or Means**
plegia	paralysis
-pnea	breathing
pneumo	air, lungs
poly-	much, many
post	after
pre-	before
procto	rectum
-ptosis	falling
pyelo	pelvis of kidney
pyo	pus
pyro	heat, temperature
renal	kidney
retro-	behind, backward
-rhage	hemorrhage, flow
-rhea	flow
rhino	nose
salpingo	oviduct
semi-	half
septic	poison, infection
stomato	mouth
sub-	under
super	above
-therapy	treatment
-thermy	heat

Word Element	Refers to or Means
thoraco	chest
thrombo	clot
thyro	thyroid gland
trans-	across
-uria, -uric	condition of, presence in urine
uro	urine
uni	one
vaso	blood vessel

KEYS TO GOOD CHARTING

I. Describe what you see:

  A. Activity of the client, including activities of daily living (dressing, bathing, feeding, personal hygiene, ambulation, continence)

    1. Does the client need assistance? How much assistance? What can the client do?

    2. Can the client tolerate activity? Does he/she become fatigued? Is the client short of breath?

    3. What is the client's reaction to activity? Is the client uninterested, disgusted, etc.?

  B. Diet and eating habits

    1. How much food was eaten, 100%, 75%, 50%, 25%, none?

    2. If less than 50% of food was eaten, list what was eaten and report to charge nurse.

    3. If the client is a diabetic, chart what was eaten and report to charge nurse.

    4. Chart food habits: likes sweets, eats from other trays, never eats vegetables, etc.

  C. Mobility and balance

    1. How is the client's position in bed, ambulating, and in chair?

    2. Does the client use a cane or walker?

    3. Describe gait and posture.

    4. Does the client have contractures?

  D. Skin condition

    1. Is there any change from the normal skin condition: breaks, drainage, scratches, bruises, discolored area, or unusually dry?

    2. Chart location, size, and color of anything unusual.

  E. Discharge or drainage from any part of the body - Chart color, odor, consistency, and amount of drainage.

II. Describe what you hear:

- A. Speech
  - 1. Does the client have difficulty speaking: mumbles, slurs words, repeats the same words over and over, etc.?
  - 2. Does the client talk to family members in the same manner as the staff?
- B. Chart and report any unusual conversations.
  - 1. State exactly what the client said.
  - 2. If the client states that he/she has pain, chart how and when it occurred, where the pain is located, if it is a dull or sharp pain, and how long the client has had the pain.
- C. Note any unusual sounds: gurgling sounds in the throat, wheezing, and coughing.

III. Describe what you smell:

- A. Poor hygiene odors
- B. Fruity
- C. Ammonia-like smell
- D. Foul
- E. Sour
- F. Bad mouth odors

IV. Describe what you touch:

- A. Use your hands to check for any abnormal areas: smooth, enlarged, swollen, tender, thin, flat, distended, and hard.
- B. Is the client's skin cold, clammy, hot, or dry?
- C. Does the client react to touch as painful or as having no sensation?

HO 3

CHECK CHARTING FORM

	HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Appetite Breakfast %	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Lunch%	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Bath or Shower	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Shampoo	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Shaved	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Oral Hygiene	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Skin Care	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Nail Care	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Out of Bed	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Repositioned Q 2 Hrs.	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Ambulated	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Siderails Up	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Restraints	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Bowel Movement	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Fresh Water	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Initials 7-3 Shift	7-3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Appetite Supper %	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Bath or Shower	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Out of Bed	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Shampoo	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Shaved	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Oral Hygiene	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Dentures Removed	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Skin Care/Back Rub	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Repositioned Q 2 Hrs.	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Nail Care	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
P.M. Care	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
P.M. Nourishment	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Ambulated	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Siderails Up	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Restraints Up	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Bowel Movement	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Fresh Water	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Initials 3-11 Shift	3-11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Bath	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Oral Hygiene	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Skin Care	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Repositioned Q 2 Hrs.	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Siderails Up	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Restraints	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Bowel Movement	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Early A.M. Care	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Fresh Water	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Initials 11-7 Shift	11-7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Appetite-Intake Code		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1-25% 3-75% 5-Refused		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2-50% 4-100%		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
6-a few bites		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Physician		Allergies			Page No.
PATIENT	Room/Bed	Admissions No./Date	Sex	Date of Birth	Current Mo/Yr

BEST COPY AVAILABLE

HO 4

NARRATIVE CHARTING

PROGRESS NOTES

Patient Name Martin Flinn D.O.B 2/8/66

Date	**Progress**
4/18/96	Called stating he had fallen off porch two weeks ago and has had complaints of pain and a
	feeling that his left knee would "give way" since then. Appointment scheduled.
4/19/96	Martin had arthroscopic surgery on his left knee in January 1996 for torn medial meniscus and
	partial tear of the cruciate. He was doing "pretty well," then had a fall a couple of weeks ago off
	the porch and has had complaints of pain and a feeling that his left knee would "give way."
	PE: Does not have any joint effusion. There is some tenderness of the medial and lateral
	collateral ligament areas. There is some slight instability of the joint.
	IMP: 1. Strain of the knee joint
	2. R/O repeat tear of the meniscus
	PLN: 1. Continue Naprosyn®
	2. Continue the brace.
	3. Was sent home. Will watch for a couple of weeks and if it does not get better,
	we will refer back to Dr. Alducin.
	CFS/csk
	T: 4/22/96
	George L. Dillard, M.D.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

SCOPE OF UNIT:

This unit is about how to chart accurately on the medical record; how to communicate effectively; how to make accurate observations about the clients and what to do with the information; how to use a care plan; basic telephone techniques; and measurements used in the health care field.

INFORMATION TOPIC: II-5 OR DEMONSTRATION:

BASIC TELEPHONE TECHNIQUES
(Lesson Title)

LESSON OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. List two criteria for answering incoming telephone calls.
2. List three steps in taking a phone message.
3. Identify the proper method of terminating a telephone conversation.
4. Identify effective telephone techniques.
5. Identify ineffective telephone techniques.
6. Identify tips in using a fax machine.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Telephone Techniques for the Health Professional
2. HO 2: Using Proper Telephone Techniques
3. HO 3: Using Proper Communications in an Emergency

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 5 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Hroneck, Dennis. *Radiology Aide*. Columbia: Instructional Materials Laboratory, University of Missouri-Columbia, 1987.

INTRODUCTION:

A person who is trained in proper use of the telephone can have a positive effect on building a professional atmosphere in the work place. The telephone conversation may be the only contact with the caller. Over the telephone, we do not have the advantage that we have in person when we are able to smile, use friendly gestures, and offer a warm handshake. On the phone, we must make up the difference with our voice and how well we come across to the caller. Remember, the person calling cannot see you and can only judge you and your place of employment through the all-important telephone conversation.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II: COMMUNICATION AND OBSERVATION SKILLS

OUTLINE:

I. Criteria for Answering Telephone Calls - When you answer the phone you represent the facility (HO 1) **(II-1)**

   A. Answer the phone on the first or second ring, if possible.

   B. Identify the department, office, or facility by name.

   C. Identify yourself by your first and last name or your title and last name.

   D. Follow up with an appropriate phrase like "How may I help you?"

   E. Find a pencil and piece of paper as you are starting the conversation and introducing yourself. "This is the ____ department; _____ speaking, may I help you?" By this time, you should have located a note pad and pencil or pen.

   F. Display courtesy.

      1. Use a natural and sincere manner of speaking.

      2. Use a friendly tone of voice.

      3. Be tactful and diplomatic.

      4. Develop the attitude of wanting to help other people. This positive attitude will come across on the phone.

      5. Speak in a moderate tone using clear and distinct words.

      6. Do not use standard phrases like, "Have a nice day," over and over again for every caller. Say something original that is appropriate to the person calling.

      7. Always smile when on the telephone; it will reflect in your tone of voice. Example telephone greeting: "Good afternoon, Belgrade Nursing Home, Miss Alton speaking, How may I help you?"

II. Taking a Telephone Message **(II-2)**

   A. Determine the purpose of the call by listening to the caller and asking questions for clarification.

   B. Take down all necessary information.

    1. Name of caller (Ask caller to spell his/her name.)
    2. Area code and phone number
    3. Date and time of call

C. Repeat the information contained in the message back to the caller to make sure it is accurate.

D. Thank the person for calling.

E. Initial message.

III. Termination of Telephone Calls **(II-3)**

A. End the call in a sincere and agreeable manner.

B. Let the caller know that you were glad to be of service.

C. Try to allow the caller to hang up first.

IV. Effective Telephone Techniques **(II-4)**

A. Answer promptly.

B. Be prepared to take notes.

C. Repeat the caller's name frequently.

D. Space outgoing calls to allow incoming calls to come through.

E. If you must put someone on hold, take the name and number of the second caller and return to the first caller, apologizing for the delay.

F. If it is necessary to leave the phone, tell the caller how long you will be gone. Upon returning, greet the caller by name again and apologize for any unavoidable delay.

G. Speak distinctly and unhurriedly.

H. When the caller asks to speak to a specific person:

    1. Tell the caller you are placing him/her on hold. If not, put the phone down or cover the mouthpiece with your hand.
    2. Take a message if the person is out or busy. Be sure the message is received.

I. Keep paper and pencil by phone.

J. Give the caller your undivided attention.

    1. Do not talk to others while taking a call.

2. Do not pick up the telephone and answer when you are finishing another conversation.

3. Do not cough, clear your throat, or blow your nose while talking on the phone.

V. Ineffective Telephone Techniques **(II-5)**

A. Do not just say "Hello." State your department name and then your name and title followed by a statement like "May I help you?"

B. Do not say "Hold on for just a second." Say, "I will need to put you on hold for a minute or two Mr./Mrs./Ms ____. I will be right back."

C. Never provide client information to callers, even if they say they are representing the client. The only exception to this is if you know the person to whom you are speaking, and he or she is privileged to have the information (i.e., the client's doctor or doctor's nurse calls and wants an oral report).

D. Never contradict or argue with a caller.

E. Do not ever say no to an emergency, even though the caller may think it is an emergency and you may not think so. Meet the caller's needs.

F. Avoid losing your poise by becoming angry.

G. Do not discuss fees or charges over the phone, unless authorized to do so.

H. Do not say "The doctor is busy." Say, "The doctor is with a client and cannot come to the phone at this time. Is there anything that I may be able to do to help you?"

I. Never hang up on someone out of anger or frustration.

J. Avoid using slang words and phrases and giving casual responses.

    1. "Okay." Instead say, "Yes, that is alright," or "Yes, I understand."

    2. "Yeah." Instead say, "Yes."

    3. "Ya know?" Instead say, "Do you know?" or "Do you understand?"

VI. Tips in Using a Fax Machine **(II-6)**

NOTE: The term "fax" is a shortened version of the word "facsimile." A fax machine uses the telephone lines to send an exact duplication of printed words or graphics to another fax machine.

A. Read and follow fax machine operating instructions.

B. Handle all fax transmittals (what is sent or received through the fax machine) as confidential information.

C. Do not leave incoming and outgoing transmittals in the machine.

D. Send fax transmittals promptly.

E. Do not send personal materials through the fax machine unless the facility allows.

VII. Summary and Conclusion

A. Criteria for answering telephone calls

B. Taking a telephone message

C. Termination of telephone calls

D. Effective telephone techniques

E. Ineffective telephone techniques

F. Tips of using a fax machine.

The next lesson is on systems of measurement.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

INTERACTION ITEMS:

1. How many criteria for answering the phone can you recall?
2. What are the steps of taking a phone message?
3. What is the proper method for terminating a telephone conversation?
4. What is the most effective way to answer a telephone?
5. What are seven ineffective telephone techniques?
6. What are tips for using a fax machine?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Using two phones, role-play the following: (You may wish to tape record the role-plays so that students can listen to them later.)
   a. An irritated caller wants to talk to the doctor and does not really want to be put off.
   b. An attorney or insurance agent has called and is asking about the client's diagnostic report and how many procedures were done.
   c. A client calls asking you to recommend the best doctor to go to for a particular problem.
   d. A person calls and wants to tell you at length about her/his illness and the many exams that she/he has had, and will be having, and, and, and, and, etc.
   e. Someone calls asking for the cost of a procedure.
2. See if the class can come up with additional slang words or phrases to be avoided when processing a telephone call. Try to determine the correct, professional version of the same thing.
3. Practice answering the telephone, and see who sounds the most professional and positive. Students will be able to hear different styles and perhaps get the opinion of other students in class about how they sound on the phone and the effectiveness of the techniques that they use.

4. Have a class discussion on why it is important to smile and exhibit a positive and professional attitude just before answering the phone, no matter what is happening at the time.

5. Have the class discuss some of the irritating things that people in businesses have done when they spoke to them for business purposes.

ANSWERS TO EVALUATION ITEMS:

1. The student may list any two of the following:

   a. Answer the phone on the first or second ring, if possible.
   b. Identify the department, office, or facility by name.
   c. Identify yourself by your first and last name or your title and last name.
   d. Follow up with an appropriate phrase like "How may I help you?"
   e. Find a pencil and piece of paper as you are starting the conversation and introducing yourself. "This is the ____ department; _____ speaking, may I help you?" By this time, you should have located a note pad and pencil or pen.
   f. Display courtesy.
      1. Use a natural and sincere manner of speaking.
      2. Use a friendly tone of voice.
      3. Be tactful and diplomatic.
      4. Develop the attitude of wanting to help other people. This positive attitude will come across on the phone.
      5. Speak in a moderate tone using clear and distinct words.
      6. Do not use standard phrases like, "Have a nice day," over and over again for every caller. Say something original that is appropriate to the person calling.
      7. Always smile when on the telephone; it will reflect in your tone of voice. Example telephone greeting: "Good afternoon, Belgrade Nursing Home, Miss Alton speaking, How may I help you?"

2. a. Determine the purpose of the call by listening to the caller and asking questions for clarification.
   b. Take down all necessary information.
      1. Name of caller (Ask caller to spell his/her name.)
      2. Area code and phone number
      3. Date and time of call
   c. Repeat the information contained in the message back to the caller to make sure it is accurate.
   d. Thank the person for calling.
   e. Initial message.
3. d
4. I
5. I
6. E
7. I
8. E
9. Answers will vary, but should point out that the confidential nature of such information does not allow the person answering the phone to discuss the client's examinations over the phone. This would require the attorney to have a release signed by the client.

10. Answers will vary, but should state that the correct way to handle this situation would be to calmly explain that the doctor is with a client and cannot come to the phone, but would be able to return the call later. Take the caller's name and number, reading the information back for verification, then ask if there is anything else you can do to help.

11. a

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

EVALUATION ITEMS:

1. List two criteria for answering the telephone in a business or professional setting.

   a.________________________________

   b.________________________________

2. State the five steps in taking a phone message.

   a.________________________________

   b.________________________________

   c.________________________________

   d.________________________________

   e.________________________________

3. Which one of the following is the proper technique for terminating a telephone conversation? (Circle the letter of the best answer.)

   a. Hang up on the caller before he/she has finished talking.

   b. Say "Good-bye" and hang up.

   c. Tell the caller that he/she should try to come in person next time since you do not have time to keep answering the phone.

   d. Let the caller know that you are interested in him/her as a person by saying, "Thank you Mr./Mrs./Ms. ___ for calling. If there is anything else that I can help you with in the future, please let me know." Then wait for the caller to hang up.

   e. Tell the caller you are sorry you cannot talk longer but you have to go now because you are busy. Thank him/her for calling and say, "Have a nice day."

The following statements are examples of telephone techniques. Place the letter "I" in the blank if the statement is an example of an ineffective telephone technique, or the letter "E" if it is an example of an effective telephone technique.

___ 4. Wait until the phone rings at least twice before you answer it.

___ 5. If someone has a message to give you, tell them to hold on until you can find a pencil or pen to write with.

___ 6. If you are making several outgoing calls, space them several minutes apart so that people calling in will not keep getting a busy signal.

___ 7. If you are too busy to talk, tell the person to call back later.

___ 8. Repeat the caller's name, Mr./Mrs./Ms. ____, in the conversation.

Write a short answer to each of the following situations.

9. A client's attorney calls and states that he/she is preparing for a hearing and is scheduled for court tomorrow. He/she needs the list of exams that were completed on his/her client the previous week. How would you respond to this request?

____

____

____

____

____

10. Someone calls and demands to talk to the doctor immediately. The doctor is with a client. The caller is becoming increasingly irritated. How would you handle such a call?

____

____

____

____

11. Which of the following is not a tip on the proper use of fax machines? (Circle the letter of the best answer.)

   a. It is okay to send personal materials through the fax machine as long as nobody sees you send it.
   b. Handle all fax transmittals as confidential information.
   c. Do not leave incoming and outgoing transmittals in the machine.
   d. Send fax transmittals promptly.

TELEPHONE TECHNIQUES FOR THE HEALTH PROFESSIONAL

The health professional must have a thorough knowledge of how to use the telephone. Never underestimate the importance of projecting a positive, professional image through your telephone personality. Remember, the caller cannot see you, and can only judge you by how you sound over the phone. Your professional voice and good telephone manners are essential elements in making a good impression.

There is a great difference between telephone conversation and face to face conversation. The friendly smile, congenial personality and warm gestures are not as apparent when meeting by telephone. Positive voice to voice meeting are created by the natural and sincere manner in which you speak. Avoid overused words or repetitious phrases, which tend to give the impression of insincerity. It is essential to give prospective as well as regular patients the impression that they are receiving personal attention and individual consideration.

In your role as a receptionist, you have many opportunities to relieve your employer of details and protect his/her prestige. Your job is doubly important on the telephone because you are representing a business. An employer depends on the receptionist to intercept and screen calls, and in many cases, handle the call rather than interrupt a doctor or other practitioner. No matter what the situation, you should always be pleasant, tactful, and diplomatic.

THE THREE PARTS OF THE TELEPHONE CALL

1. Identification (introduction)
    a. Answer promptly, make the first impression a favorable one by answering on the first ring.
    b. Provide proper identification. Identify your place of work and then state your first and last name and title. It is important to let the caller know that he or she has reached the right person.
    c. Answer in the manner in which your employer wishes you to--usually by saying, "This is the ____ department; ____ speaking, may I help you?"
    d. Do not answer with a number of an extension, i.e., "This is extension 671."
    e. Establish a courteous and friendly attitude.
    f. Be prepared to take written messages by having a pencil and note pad available.
2. Body of the call (purpose)
    a. This is the reason for the call, such as to make arrangements or plans, or to find out specific information.
    b. Always obtain the caller's name and telephone number.
    c. If the caller is a new client, ask who referred him/her.
    d. Never use the term "cancellation." It has a negative and harsh sound. Instead of "We have a cancellation," say, "We can get you in at _______."
    e. When taking a message, be accurate. Repeat the information to the caller to assure him/her that you have the correct information.
    f. If the caller is a new client, obtain address, phone number of home and business, and the correct spelling of his/her name.

3. Termination (conclusion)
    a. End the call in a sincere and agreeable manner.
    b. Let the caller know you were glad to be of service.
    c. Let the caller hang up first.

HOLDING THE TELEPHONE

1. Hold the telephone mouthpiece one-half to one inch away from your lips. Your voice is carried more clearly by the telephone if you hold the transmitter close to your mouth and if you speak directly into the phone. A good rule is: if two fingers are placed against the mouth piece and your lips against the fingers, even a person who is hearing impaired will be able to hear due to the vibrations of the transmitter. It is never necessary to shout into the telephone.
2. Never have anything in your mouth. Do not chew on a pencil or gum; do not smoke.

INEFFECTIVE TELEPHONE TECHNIQUES

1. Never say "hello" without providing proper identification.
2. Never demand information. Ask for information in a courteous manner.
3. Never give out information that may damage your employer's image.
4. Never contradict a client directly.
5. Never discuss the habits or problems of one client with another.
6. Never say no to an emergency.
7. Never use the term "okay" or other slang terms.
8. Never lose poise or become angry.
9. Never use the business phone for personal business.

EFFECTIVE TELEPHONE TECHNIQUES

1. Answer promptly.
2. Be prepared to take a message.
3. Be courteous even though a caller may be discourteous.
4. Repeat the caller's name several times during the conversation to give the caller a sense of familiarity.
5. Space outgoing calls to allow incoming calls to come through.
6. Retain the initiative. Learn when and how to cut off long-winded callers tactfully.
7. If more than one line is ringing and you must ask the caller to hold, take the name and telephone number of the second caller as quickly as possible and return to the first caller, apologizing for the delay.
8. If necessary, have the caller's file containing history and other information at hand. You will be prepared, and the call will be handled much more efficiently.
9. Screen calls in a businesslike manner.
10. If it is necessary to leave the phone, be sure to tell the caller how long you will be gone. Upon returning, greet him/her by name, and if there was an unavoidable delay, apologize.
11. Speak distinctly and unhurriedly.

Remember, the most important part of a telephone call is the closing. Always end your conversation with a few pleasant words: "Thank you for calling. It's good to speak to you again," or "I'm so glad you called that to my attention." By learning and practicing these techniques, you will make the most of a few moments of personal contact between you and someone who needs your help. You will look, sound, and feel professional.

USING PROPER TELEPHONE TECHNIQUES

The goal of this section is for you to feel more confident using the telephone.

1. Tips for answering the telephone

   a. Organize your work area. Know where your phone, message pad, company directory, and telephone book are. Be sure the phone and plenty of pens and pencils are within easy reach.

   b. Locate the incoming call on most multi-line phones by the flashing light. Push in the flashing button and pick up the receiver.

   c. Answer the call with a pleasant tone of voice. Give the name of your company and your first name.

   d. Speak clearly and don't mumble. Ask what the caller wants and determine how you may help him or her.

   e. Let yourself be interrupted when a call comes in. Don't let impatience show in your voice.

   f. If the caller wants a person or department that has another extension, connect the caller to the extension number. If someone who has no extension is asked for, go get the person. (Don't yell.)

2. Polite speaking and listening techniques.

   a. Whenever possible, answer the phone within three rings. Letting the phone ring longer gives the impression your company is poorly run.

   b. Listen carefully to the caller. Callers do not always know what they want. If so, you need to decide who the caller should talk to or what information the caller needs.

   c. If the caller is an unhappy customer, listen to the caller's entire story, even when the problem is not your fault.

      If the customer is upset by something the company did or didn't do, apologize briefly. This helps an angry customer cool off.

   d. Be pleasant. If you are pleasant, the caller will more likely use the services of your company again.

   e. Use the customer's name if he or she gives it. If the caller does not give his or her name, do not ask for it.

f. Repeat some of the customer's own words as you ask questions and get more information. This shows the caller you are listening.

g. Let the caller interrupt you. Often the caller needs to "blow off steam" and does not mean to be personally rude.

h. Don't make personal out-going calls unless you do it on your time or you know it is O.K. with your company.

3. Taking Messages and Inquiries

To handle an incoming call:

a. Listen carefully to the reason the person is calling.

b. Decide if you need to take a message or answer a question.

c. Ask questions. Be sure you know what the caller wants. If you need to take a message, write it down. You will rarely remember it unless you write it down.

d. Be sure to ask the caller:

(1) the name of the person he or she wants,
(2) the caller's name,
(3) the nature of the business,
(4) the caller's phone number, and
(5) when the caller can be reached.

e. Confirm all information. Repeat to the caller any agreements or arrangements that have been made. Make sure the caller is satisfied with the arrangements before you hang up.

f. End the call pleasantly. Say goodbye and thank the person for calling. Let the caller hang up first. Do not hang up the receiver before you hear the caller hang up.

g. Do not slam the phone down when you hang up.

4. Using the telephone book

a. The telephone directory has six sections that help people find the number, name and location of businesses, people or agencies in the directory.

(1) Emergency Numbers. All emergency numbers are listed on the inside front cover or toward the beginning of the book so they can be found quickly in an emergency.

(2) Customer Guide. The Customer Guide, usually near the front, includes numbers for the telephone company's directory assistance, business, repair, billing and customer rights offices.

(3) The White Pages. The white pages carry listings for individual people and businesses. Numbers are listed in alphabetical order by the person's last name or the name of the business.

(4) The Yellow Pages. In the Yellow Pages, you find only businesses and agencies listed by category.

"Tony's Termites," for example, might be found under P for Pest Control. Categories in the Yellow Pages are organized alphabetically.

If a business is not listed under the category you expect, think of another name for the category. Sometimes the Yellow Pages will tell you to look under a different category.

(5) The Appendix. The Appendix usually carries a city or street map. Callers can use the map to locate an address within a city.

(6) Frequently Called Numbers. This section is usually found at the back of the phone book. It is a handy place to keep phone numbers you call often.

USING PROPER COMMUNICATION IN AN EMERGENCY

You must know and follow basic procedures in case of an emergency on the job. When you begin a job, be sure to get information about emergency procedures for employees. Because each company's procedures may be different, you need to know the details.

The biggest rule in any crisis is: DON'T PANIC -- STAY CALM.

To communicate properly in an emergency, you must try to think calmly and speak calmly to other people. Don't let your panic take over your thoughts and voice, or you will not be able to communicate.

1. Be able to tell others calmly where emergency equipment is located. Learn where the fire extinguishers are located and how to operate them. Learn where the first-aid kit is located.

2. Be able to tell others calmly where emergency exits are located. Remind them calmly to walk -- NOT RUN -- to the exits.

3. Know, or know where to find, emergency phone numbers for the fire department, rescue service, poison control and hospital. Make sure the numbers are displayed in an obvious place. In an emergency, you may not have time to locate the numbers in a phone book.

4. During a Crisis

    a. Don't panic. Assess the situation and decide what is your best move. Keep others calm.

    b. Report the emergency to your supervisor as soon as you can. Follow his or her instructions. He or she may want you to call the proper authorities.

    c. If your supervisor is not available, you must decide what needs to be done. In an emergency, it is usually best to phone the proper authorities (fire department, police; ambulance, etc) even if your supervisor has not told you to.

       As calmly as possible, tell the person who answers (1) your name, (2) your address, (3) what has happened, and anything else the person asks for.

    d. When there is an injured person, if possible, do not move the person. It sometimes causes further injury. Only move a person when their life is in danger.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

SCOPE OF UNIT:

This unit is about how to chart accurately on the medical record; how to communicate effectively; how to make accurate observations about the clients and what to do with the information; how to use a care plan; basic telephone techniques; and measurements used in the health care field.

INFORMATION TOPIC: II-6 OR DEMONSTRATION:

SYSTEMS OF MEASUREMENT

(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Identify U.S. customary/household system of measurements.
2. Identify metric units of measurements.
3. Convert common U.S. customary/household measurements to metric system.
4. Utilize metric system in measuring in the health care system.
5. Write ten (10) Arabic numbers as roman numerals.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Metric Table of Units
2. HO 2: Converting Metric Measurements to U.S. Customary/Household
3. HO 3: U.S. Customary and the Metric System Activity Sheet
4. HO 4: Calculating Measurement Conversions - Activity Sheet
5. HO 5: English - Metric Conversions - Activity Sheet
6. HO 6: Applied Metric Measurements - Activity Sheet

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 6 prior to class and be prepared to discuss the information.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Woodrow, Ruth. *Essentials of Pharmacology for Health Occupations*, 2nd ed. Albany, New York: Delmar Publishers, Inc., 1992.

Medication Technician. University of Missouri-Columbia: Instructional Materials Laboratory, 1986.

INTRODUCTION:

Because the health care system extends over the entire world, it is important for the health care assistant to understand the systems of measurements.

The apothecary system was the original system of weights and measures but is no longer commonly used. This lesson will focus on the two more common systems of measurement, the metric system and the household system. The metric system is the preferred system of measurement in health care settings at the present time. The household system is the one which you are probably the most familiar with and the one used when individuals take medications in the home.

It will be important for you to recognize the symbols and abbreviations of the metric and household systems and be able to convert from one system to another. In this lesson, you will study these two systems of measurements as they relate to health occupations.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

OUTLINE:

I. U.S. Customary Units of Measurement - Household System **(II-1)**

- A. Volume or liquid measurement
  - 1. Drop - qtt
  - 2. Teaspoon - tsp
  - 3. Tablespoon - Tbsp
  - 4. Fluid ounce - fl. oz, ℥
  - 5. Cup - c
  - 6. Pint - pt.
  - 7. Quart - qt or qt.
  - 8. Gallon - gal.
- B. Weight
  - 1. Ounce - ℥ , oz, or oz.
  - 2. Pound - lb. or lb
- C. Length
  - 1. Inch - in
  - 2. Foot - ft
  - 3. Yard - yd

D. To convert inches to feet, divide the number of inches by 12. (12 inches = 1 foot)

Example:

5 ft 6 in
12 in | 66 in (height of individual)
(one foot) | 60 (5 x 12 = 60)
6 inches

II. Metric Units of Measurement (II-2)

A. Invented by the French in the late eighteenth century.

B. The metric system is the international standard for weights and measures. (HO 1)
   1. It is based on subdivisions of ten.
   2. All multiples and subdivisions of the standard units are based on the number 10.

Prefix	**Meaning**	
milli	1000 of these in a standard unit	Subdivisions
centi	100 of these in a standard unit	
deci	10 of these in a standard unit	
deka	10 times the standard unit	Multiples
hecto	100 times the standard unit	
kilo	1000 times the standard unit	

C. The metric system allows for very small measurements, especially good for medications and solutions.

D. The metric system is the system typically used in weighing and measuring the growth of infants. Many growth and development charts use the metric system to depict average ranges.

E. Most Common Metric Units of Measurement

Unit	Abbreviation	Subdivision
cubic centimeter	cc	1000 of these in a liter
milliliter	ml (1 cc = 1 ml)	1000 of these in a liter
liter	l	standard unit - liquid volume
milligram	mg	1000 of these in a gram
Gram	g	standard unit - weight
Kilogram	kg	1000 grams (is the standard unit)
millimeter	mm	1000 of these in a meter
Centimeter	cm	100 of these in a meter
meter	m	standard unit - length

F. Standard Units of Metric Measurements (HO 2)

1. A liter is the standard unit to measure volume of a liquid in the metric system.
2. The gram is the standard unit to measure weight in the metric system.
3. The meter is the standard unit to measure length in the metric system.

III. Measurement Equivalents (HO 1-6) **(II-3-8)**

A. Liquid

US Customary/Household	Metric
15 drops (approx.)	1 milliliter (1 cubic centimeter)
1 teaspoon (tsp)	5 milliliters (5 cc)
6 tsp/2 Tbsp/1 fl oz	30 milliliters (30 cc)
4 fl oz/juice glass	120 milliliters (120 cc)
16 Tbsp/8 fl oz/1 Cup	240 milliliters (240 cc)
2 cups/1 pint	500 milliliters (500 cc)
4 cups/2 pt/1 quart	1000 milliliters (1000 cc)

B. Length

1 inch	2.54 cm
1 mile	1.6 km
39.4 inches	1 m

C. Weight

1 lb	454 g
2.2 lb	1 kg
1 oz	30 g

IV. Roman Numerals/Arabic Number Table **(II-9)**

A.

ARABIC	ROMAN
1	I
2	II
3	III
4	IV
5	V
6	VI
7	VII
8	VIII
9	IX
10	X
20	XX
30	XXX
40	XL
50	L
60	LX
70	LXX

80	LXXX
90	XC
100	C
150	CL

B. Rules for reading roman numerals

1. A repeated letter repeats the value.

   Ex. III = 3

2. A letter occurring after one of greater value is added thereto.

   Ex. VI = 6

3. A letter occurring before one of greater value is subtracted therefrom.

   Ex. IV = 4

C. Examples of when Arabic and Roman numerals are used

1. Roman numerals are used for some drugs and solutions.

   a. Prescriptions can contain both Arabic and Roman numerals.

      1) Aspirin 325 mg., take ii tabs every 4 hours

      2) Cough syrup, take ii teaspoons q 4 hours as needed

   b. Most health care workers need to understand medications that clients are taking. The following are just some examples of health care workers that may be handling medications.

      1) Medical assistants

      2) Respiratory therapists

      3) Physical therapist assistants, occupational therapist assistants, speech therapy assistants

      4) Dental aides

      5) Pharmacy aides

2. Arabic numbers are used to measure the height and weight of clients.

3. Arabic numbers are used to order supplies.

4. Arabic numbers are used for communicating currency terms when:
    a. Ordering Supplies.
    b. Managing accounts receivable.
    c. Managing accounts payable.
6. Arabic numbers are used for filing numerically.

V. Summary and Conclusion
  A. U.S. Customary units of measurement
  B. Metric units of measurement
  C. Measurement equivalents
  D. Roman numeral/Arabic table

The next unit is on safety.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

INTERACTION ITEMS:

1. What are the units of measurement in the U.S. Customary System?
2. What are the Metric units of measurement for length, weight, and volume?
3. How many cubic centimeters are in 1 teaspoon?
4. How many fluid ounces are in 30 cubic centimeters?
5. How many cubic centimeters are in 8 fluid ounces?
6. How many fluid ounces are in 300 cubic centimeters?
7. How many milliliters are in 1 quart?
8. How many cubic centimeters are in 4 fluid ounces?
9. What is the Roman numeral equivalent for the Arabic numbers 1 through 10 and 20, 50, 100, and 150?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Practice converting U.S. Customary measurements to Metric measurements.
2. Have students complete activity sheets.

ANSWERS TO U.S. CUSTOMARY & THE METRIC SYSTEM - ACTIVITY SHEET (HO 3)

1. a. milligram
   b. ml
   c. liter
   d. cm

2. a. 1000
   b. 1000
   c. 1
   d. 1000

3. a. 1
   b. 454
   c. 30

d. 2.2
e. 2.54

ANSWERS TO CALCULATING METRIC CONVERSIONS - ACTIVITY SHEET (HO 4)

1. 4
2. 450
3. 5.5 or 5 ½ feet

4. a. 120
   b. 90
   c. 60

5. 4
6. 4
7. 420
8. 500
9. .03
10. 250
11. .1

ANSWERS TO ENGLISH-METRIC CONVERSIONS - ACTIVITY SHEET (HO 5)

1. 1
2. 454
3. 1.6
4. 39.4
5. 30
6. 2.54
7. 2.2
8. 30
9. .6
10. 2.27
11. 128
12. 236.4
13. 10.16
14. 3
15. 900
16. 20
17. 2
18. 10
19. 25
20. 10
21. 4540
22. 1.2
23. 1.8
24. 2000
25. 166.6
26. 1.2

ANSWERS TO APPLIED METRIC MEASUREMENTS - ACTIVITY SHEET (HO 6)

1. 15
2. 25.4
3. 2

ANSWERS TO EVALUATION ITEMS:

1. a
2. a
3. b
4. a
5. b
6. a
7. b
8. a
9. a
10. b
11. d
12. c
13. a
14. e
15. c
16. b
17. a
18. f
19. d
20. v
21. x
22. ii
23. vii
24. i
25. viii
26. iii
27. 5
28. 1
29. 240
30. 10
31. 454
32. 1000
33. 120

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT II : COMMUNICATION AND OBSERVATION SKILLS

EVALUATION ITEMS:

Match the measurement in Column I to the correct system in Column II. A and B may be used more than one time.

Column I

____1. Drop

____2. Teaspoon

____3. Milliliter

____4. Fluid ounce

____5. Milligram

____6. Tablespoon

____7. Cubic centimeter

____8. Ounce

Column II

A. U.S. Customary/Household System

B. Metric System

Read the following scenarios carefully. Use your conversion chart to make your calculations and then circle the letter that corresponds to the best answer.

9. An administrative medical assistant is helping with the assessment of a 6-week old infant in the physician's office. The baby is 21 inches long and weighs 8 pounds. Convert these U.S. Customary measurements to the metric system of measurement. What is the baby's length?

   a. 53.34 cm
   b. 533.4 cm
   c. 176.0 cm
   d. 17.6 cm

10. In the above scenario, what is the baby's weight?

   a. 36 kg
   b. 3.6 kg
   c. 176 kg
   d. 17.6 kg

11. A pharmacy aide needs 500cc of a certain solution. The plastic container holds 2 quarts of fluid and is full. How many cubic centimeters will remain after the aide measures out the 500cc?

    a. 4500 cc
    b. 3500 cc
    c. 2500 cc
    d. 1500 cc

12. A dental aide is preparing a local anesthesia set-up for the dentist. The aide selects an aspirating syringe and a cartridge that contains 1.8 ml of anesthesia for the dentist. How many ccs are in the cartridge?

    a. 3.6 cc
    b. 0.9 cc
    c. 1.8 cc
    d. 5.4 cc

13. A pharmacist needs to make 1000 capsules, each containing 1 mg. of a drug. The drug comes packaged in bulk form of 500 grams. How many grams of the drug will be needed to make the capsules?

    a. 1 gram
    b. 25 grams
    c. 100 grams
    d. 250 grams

Match the term of measurement in Column I with the correct abbreviation or symbol in Column II.

	Column I		Column II
_____14.	Gram	a.	l
_____15.	Centimeters	b.	cc
_____16.	Cubic centimeters	c.	cm
_____17.	Liter	d.	mg
_____18.	Kilogram	e.	g
_____19.	Milligram	f.	kg

Write the following as Roman numerals.

20. 5 _______

21. 10 _______

22. 2 _______

23. 7 _______

24. 1 _______

25. 8 _______

26. 3 _______

Convert the following.

27. 1 tsp = ________cc

28. 30 cc = ________fl oz

29. 8 fl oz = _______cc

30. 300 cc = _______fl oz

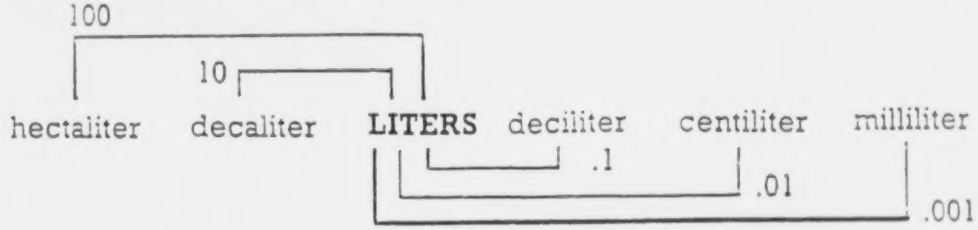
31. 1 pound =___gram

32. 1 quart = ___milliliters

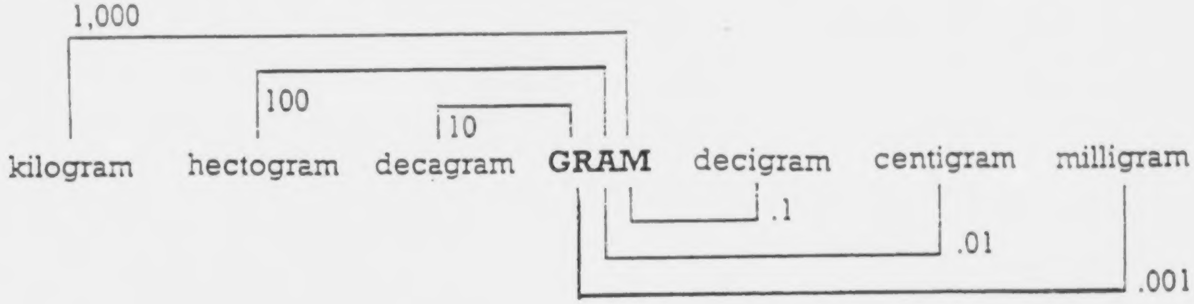
33. 4 fluid ounces = _______cubic centimeters

METRIC TABLE OF UNITS

VOLUME - BASIC UNIT IS LITER


100
10
hectaliter
decaliter
LITERS
deciliter
centiliter
milliliter
.1
.01
.001

WEIGHT - BASIC UNIT IS GRAM


1,000
100
10
kilogram
hectogram
decagram
GRAM
decigram
centigram
milligram
.1
.01
.001

1. If the decimal point is moved to the right, the value is multiplied by 10.
   0.1 x 10 = 1.0

   To convert from a larger measure to a smaller measure, multiply.

   To convert 5 l to ml, multiply 5 l by 1000 since milliliter is three places to the right of liter.
   5 l x 1000 = 5000 ml

   To convert 2 g to mg, multiply 2 g by 1000 since milligram is three places to the right of gram. 2 g x 1000 = 2000 mg

2. If the decimal point is moved to the left, the value is divided by 10.
   1.0 ÷ 10 = 0.1

   To convert from a smaller measure to a larger measure, divide.

   To convert 100 mg to g, divide by 1000 since g is three places to the left of mg.
   100 mg ÷ 1000 = 0.1 g

   To convert 2500 ml to liters, divide by 1000 since liters are three places to the left of ml.
   2500 ml ÷ 1000 = 2.5 l

BEST COPY AVAILABLE

CONVERTING METRIC MEASUREMENTS TO U.S. CUSTOMARY/HOUSEHOLD

Linear Measurements:

- To convert inches to centimeters, multiply the number of inches by 2.54. (1 inch equals 2.54 centimeters)
- To convert feet to centimeters, multiply the number of feet by 30.48 centimeters. (1 foot equals 30.48 centimeters)
- To convert centimeters to inches, divide the number of centimeters by 2.54
- To convert centimeters to feet, divide the number of centimeters by 30.48

Weight Measurements:

- To convert pounds to grams, multiply the number of pounds by 454.
- To convert pounds to kilograms, divide the number of pounds by 2.2. (1 kilogram equals 2.2 pounds)
- To convert kilograms to pounds, multiply the number of kilograms by 2.2.
- 50 kg = 110 pounds
- 60 kg = 132 lbs
- 1000 Gm (kg) = 2.2 lbs

Liquid Measurements:

- 5 cc or ml = 1 teaspoon (tsp)
- 15 cc or ml = 1 tablespoon (tbsp)
- 30 cc or ml = 1 fluid ounce
- 240 cc or ml = 1 cup (8 fluid ounces)
- 500 cc or ml = 1 pint (16 fluid ounces)
- 1000 cc or ml = 1 quart (32 fluid ounces)

U.S. CUSTOMARY & THE METRIC SYSTEM - ACTIVITY SHEET

Student Name____ Date________________

1. Give the abbreviations or full name of the following.

   a. mg ____________________ c. l____________________

   b. Milliliter ____________________ d. Centimeter __________

2. Complete the following statements.

   a. 1 g = ________mg

   b. 1 kg = _______g

   c. 1 cc = _______ml

   d. 1 l = ________cc

3. Give the following English-metric relationships.

   a. 1 qt = _____l

   b. 1 lb = _____g

   c. 1 fl oz = _____cc

   d. 1 kg = _____lb

   e. 1 in = _____cm

CALCULATING METRIC CONVERSIONS - ACTIVITY SHEET

Student Name____ Date______________

Convert the following.

1. 120 ml = _____fluid ounces
2. 15 fl oz = _____ml
3. Carrie Smith is 66 inches tall. How many feet tall is she?
4. Calculate the following. Convert to cubic centimeters.
   a. 2/3 6 fl oz glass = _____cc
   b. 1/4 of 12 fl oz broth = _____cc
   c. ½ of 4 fl oz jello = _____cc
5. Two fluid ounces = _____tablespoons
6. _____ cups = 1 qt
7. 14 fl oz = _____ml
8. 0.5 liters = _____ml
9. 30 mg = _____g
10. 0.25 liters = _____ml
11. 100 mg = _____g

HO 5

ENGLISH - METRIC CONVERSIONS - ACTIVITY SHEET

Student Name______________________________ Date________________

Give the following English-metric relationship.

1. 1 qt =______l
2. 1 lb =______g
3. 1 mile =______ km
4. 1 m = ______in.
5. 1 oz = ______g
6. 1 in = ______cm
7. 1 kg = __________lb
8. 1 fl oz =__________cc

Make the following conversions.

9. 300 g =____lb
10. 5 lb = _____kg
11. 80 mile =_____km
12. 6 m =______in
13. 4 in =______cm
14. 3 l = ______qt
15. 30 oz = ____g
16. 600 cc = ____fl oz
17. 5.08 cm = ____in
18. 10 qt = ______l
19. 40 km = ______mile
20. 300 ml = ______fl. oz
21. 10 lb = _______g
22. 1200 cc = _____qt
23. 60 oz = _______kg
24. 2 qt = ________ml
25. 5 kg = ________oz
26. 40 fl oz = _____l

APPLIED METRIC MEASUREMENTS - ACTIVITY SHEET

Student Name____ Date____________________

Solve the following problems. Show your work in the space provided.

1. A pharmacy aide is setting up a stock drug for the Pharmacist to mix a medication for a toddler who has been hospitalized for a respiratory infection. The toddler is 22 months old and weighs 33 pounds. The pharmacist must know how many kilograms the child weighs. The pharmacy aide makes the conversion.

   33 lbs. =______kg

2. A central supply assistant is instructed to cut paper tape used to prepare instruments for sterilization into 10 inch strips. The only measuring tape available is marked in centimeters. How many centimeters will each strip need to be in order to measure 10 inches?.

   10 inches =______cm

3. Mrs. Scoggins is a 84 year old client who lives at home. She only requires assistive care that is provided by a Home Health Aide. The doctor has order Mrs. Scoggins to take 10ccs of a cough expectorant 4 times a day. If Mrs. Scoggins is taking her medicine correctly, how many teaspoons should she take each day?

   _________teaspoons = 10cc

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

SCOPE OF UNIT:

This unit covers all areas of safety. It refers to specific measures to be aware of regarding clients, the environment, particular safety devices, as well as the role of the health care assistant in fire and disaster safety and using body mechanics to position the client.

INFORMATION TOPIC: III-1 OR DEMONSTRATION:

SAFETY MEASURES FOR THE CLIENT AND THE ENVIRONMENT

(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Identify causes of accidents.
2. List which clients require specific safety measures.
3. Identify ways the health care assistant can help prevent falls.
4. Identify ways the health care assistant can help prevent fires and burns.
5. Identify ways the health care assistant can help prevent poisoning.
6. Describe nursing care measures to ensure client safety.
7. List two reasons for applying safety devices.
8. Describe the use of safety devices.
9. Identify problems or behaviors that may occur when restraints are used.
10. Identify the health care assistant's responsibilities if restraints are used.
11. Identify safety measures for a safe environment.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1.	HO 1:	Alternatives to Restraints
2.	HO 2:	Safety Guidelines: Infant Through Adolescents

3. HO 3: Restraints
4. Bed with side rails
5. Safety vest or jacket
6. Posey/safety belt
7. Wrist/ankle restraint
8. Roll belt
9. Mitten
10. Transfer belt
11. Hydraulic lift
12. *Cardiopulmonary Resuscitation*, video #10, available from the Missouri Vocational Resource Center, 14 min.
13. *Patient Restraints*, video (TF #104), 81 min., available from the Missouri Division of Aging Film Library
14. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 1 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 30.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 15.

Hegner, Barbara; Ester Caldwell. *Nursing Assistant: A Nursing Process Approach*. 6th ed., Albany, NY: Delmar Publishers, 1992, Units 8 & 42.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 2.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies.* 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 7.

Injury in Missouri. Jefferson City, MO: Missouri Department of Health, Missouri Center for Health Statistics, 1992.

INTRODUCTION:

The health care assistant must be very conscious of any condition that may cause an accident. A client who receives an injury from an accident may require many days of hospitalization or rehabilitation. This can be very costly and may result in the client's loss of independence, or even death.

Safety is a basic need of every human. The health care client is frequently dependent upon the caregiver to provide safety for him/her. It is a responsibility of the health care assistant to monitor for and report anything that may lead to an accident or injury of a client, visitor, or staff member.

More Missourians are hospitalized from falls than for any other injury. In 1990, 18,643 people were hospitalized because of falls. Adults over the age of 65 are most at risk from dying or suffering severe long-term effects from injuries due to falls. The elderly are more likely to have fall-related injuries to the spinal column or cord. Children are most likely to have fall-related injuries to the head. Another 11,020 individuals were hospitalized in 1990 because of poisoning.

In an average week across Missouri, 7 people will die from falls, 359 will require hospitalization due to falls, 2 will die from poisoning, 91 will require hospitalization due to poisoning, 2 will die from burns or fires, and 22 will be hospitalized due to exposure to fires.

In particular, infants and children must be protected from injury. They like to explore their surroundings which may result in falls, poisoning, choking, and burns. Remember, children love to put objects in their mouths, and they touch and feel everything around them.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

OUTLINE:

I. Causes of Accidents (II-1)

   A. Usually a combination of causes

   B. Dizziness caused by lack of oxygen to brain or low blood sugar

   C. Tumors - cause loss of balance

   D. Tremors

   E. Loss of balance during postural changes

   F. Visual changes - especially depth perception

   G. Confusion

   H. Forgetfulness

   I. Change in furniture arrangements

   J. Unlighted halls

   K. Inadequately identified medications

   L. Wet floors or other floor hazards

   M. Crib rails left down

   N. Unattended infants and small children

   O. Open electrical outlets that children can put their mouths on

   P. Medications and household products that children can reach and open

   Q. Loose parts or sharp edges on toys

   R. Propped baby bottles

   S. Stairs

II. Client Conditions that Require Specific Safety Measures (HO 2) **(II-2)**

A. Confused client - due to medication, poor nutritional status, emotional disturbance, disease of brain, or disease of cardiovascular system

B. Elderly

1. Aging process - there is a decrease in the senses (taste, touch, smell, hearing, and vision): client is less aware of danger warning signals

2. It takes longer to react to danger.

C. Client sedated with drugs

D. Unconscious client

III. Falls **(II-3)**

A. Cause

1. Result of tripping, slipping, climbing, or reaching for items (can occur at any age)

2. Shoes

3. Loose clothing which is too long

4. Tripping over items in walk areas or door sills

5. Tripping over loose cords

6. Stairs

7. Wax on floors

8. Spills of any kind

9. Worn uneven rubber tips on canes and walkers

10. Slipping in bathroom

11. Loss of balance when getting on and off the toilet seat

12. Unsupervised young children going up and down stairs

B. Prevention

1. Always change position of client slowly. This provides time for the client to gain equilibrium (balance).

   NOTE: Do not leave a client alone immediately following a change in position.

2. Shoes should be well-fitting with broad, low heels. Bedroom slippers do not offer support.

3. Shoelaces must be tied.

4. Clothing should not be too long or very loose.

5. Remove any obstacles from floors.

6. Wipe up spills immediately.

7. Report to charge nurse if a client complains of dizziness, prone to falling, has an unsteady gait, slides out of wheelchair, or tries to climb over side rails.

8. Report broken equipment immediately.

9. Use equipment according to facility policy.

10. Report immediately any unsafe hazards such as leaks in the bathroom or shower, loose handrails, loose carpeting.

11. Answer call lights promptly and make certain they are functioning.

12. Properly position clients.

13. Follow facility procedure regarding side rails and crib rails. Side rails and crib rails are a frequent cause of falls.

14. When transferring clients, make certain wheelchairs, beds, commodes, and stretchers have wheels locked.

15. The bed adjustment handle should be in the "in" position when not being used.

16. Use nonslip strips or rubber mat in the tub or shower.

17. Leave beds in the lowest horizontal position when not giving care.

18. Orient client to any change in furniture location.

19. Report any lights which are burned out.

20. Use gait belt properly.
21. All tubs and showers should have chairs.
22. Avoid using bath oil in the tub; it makes the tub slippery.
23. Never leave children unattended in high chairs or walkers.
24. Do not allow children to climb up and down stairs.
25. Use safety devices during transfers and ambulation activities.
    a. Transfer belt (often called gait belt)
        1. Canvas belt with an adjustable buckle; used when transferring or ambulating client
        2. Placed around the client's waist
        3. Should never be used as a restraint
    b. Hydraulic lift
        1. A hydraulic lift with a one-piece canvas sling for transferring the client who is extremely heavy or handicapped
        2. Use discretion and common sense in determining if the client who is severely spastic or handicapped can be lifted with the lift

IV. Fire and Burns **(II-4)**

A. Causes in elderly
1. The elderly have a decreased awareness of sensations of pain and temperature.
2. Confusion - forgetfulness
3. Smoking
4. Oxygen in use
5. Electrical overload, frayed wires, loose connections

B. Causes in children
1. Hot liquids that can be reached
2. Matches or cigarette lighters
3. Stoves or fireplaces

C. Prevention of fires and burns

1. Restrict smoking to supervised areas. Fire laws prohibit smoking in bed when the client is unattended. Most hospitals do not allow smoking in the building.

2. Immediately report any client seen with matches or lighters who does not have permission to carry them.

3. If oxygen is in use, take special precautions.

   a. Turn oxygen off when not in use.

   b. No open flames in the area - cigarettes

   c. Use no flammable liquids such as nail polish or alcohol on client; no petroleum-based products on face

   d. Do not use electrical equipment such as razors or radios.

   e. Visitors must follow oxygen precautions. Warn them.

4. Check water temperature in shower, tub, and whirlpool. CAUTION: Electronic thermometers may not always be accurate.

5. Assist clients at meal time to prevent spills of hot liquids.

6. Use only cotton blankets on beds.

7. Know the location of fire extinguishers and how to use them.

8. Know the facility's written plan to be followed in case of a fire for evacuating clients.

9. Immediately report any signs of electrical overload, frayed wires or loose connections.

10. Keep cigarette lighters and matches out of the reach of children

11. Supervise children.

D. In case of fire:

1. Immediately move the client to safety.

2. Once the client(s) is safe, sound the alarm.

3. Once the alarm is sounded, follow the evacuation plan as practiced.

   DO NOT PANIC!!!

V. Poisoning - occurs more often in children but can occur at any age **(II-5)**

A. Cause

1. Client mistakenly drinks a harmful liquid.

2. Visitor brings in medication and it is taken by another client.

3. The medicine room door is not locked when unattended.

4. Clients hoarding medications.

5. Medications and household products left where children can reach them.

B. Prevention

1. Make certain no harmful liquids or medications are left where the client might swallow them - cleaning solutions, fingernail polish remover, unauthorized medications, lighter fluid, insect spray, aspirin, etc. Store in a high, locked area.

2. Immediately report unlocked medication room.

3. Make certain everything is labeled.

4. Buy products with child-proof caps.

VI. Safety Measures for All Clients (HOs 1 & 2) **(II-6)**

A. Check eyeglasses for cleanliness and labeling; make sure client wears his/her own glasses.

B. Check hearing aid to make sure it is functioning properly; make sure client wears it.

C. Handle mechanical aids with care; can be expensive to replace if damaged.

D. Place signal cord within reach of client at all times; client may injure self trying to get to it.

E. Check bed brakes; should be in lock position unless moving the bed.

F. Side rails should be up when indicated, check with charge nurse.

G. Keep bed in low position to decrease danger of falls.

H. When feeding clients, take precautions to avoid burns from hot food.

I. Give instructions clearly to prepare client for an activity.

J. Allow smoking only under supervision and in approved areas. Supervise clients when they smoke, particularly if weak, unsteady, or confused.

K. Allow clients to adjust to changes in position before asking them to move.

L. Lock brakes on wheelchair, shower chair, or geri-chair when not being moved.

M. When bathing clients, use a bath thermometer to avoid burning the client.

N. Correctly apply all safety devices.

O. Assess client's ability to ambulate; check for:

  1. Unsteady gait
  2. Unbalanced - holds on to objects
  3. Posture
  4. Complaints of dizziness

P. Be alert to the potential hazards of swinging doors opening into rooms.

Q. Monitor clients who may wander away.

R. Report to the charge nurse immediately if you think a client is a danger to himself/herself or others.

S. Make certain all electrical outlets have safety plugs.

T. Always supervise children. Never leave them alone.

VII. Reasons for Using Safety Devices **(II-7)**

A. To ensure client's safety

B. To help a client maintain proper body position and balance

C. To keep a confused client from disrupting a treatment procedure, such as an IV, nasogastric tube, or dressing

D. To prevent a severely emotionally disturbed client from injuring himself/herself or others

VIII. Safety Devices and Restraints (HO 3) - safety devices are apparatuses used to ensure a safe environment for the client. Restraints are devices used to control a confused, disoriented, psychotic, or irrational person. Restraints must be ordered by a physician or an authorized person before they are used. **(II-8)**

NOTE: According to the Omnibus Reconciliation Act of 1987 (OBRA), alternatives to restraints must have been tried, documented, and be unsuccessful before restraints can be ordered.

A. Bed side rails - a frequent cause of falls

   1. Metal frames placed on sides of bed
   2. Prevent client from falling out
   3. Do not prevent client from climbing out
   4. Must be securely attached
   5. May be used for clients who are blind, confused, unconscious, sedated, have muscular disabilities, or seizures
   6. Rails may be lowered while working at bedside.
   7. Remember to raise before leaving client; be sure both sides are up as instructed by charge nurse.
   8. Always explain the purpose.
   9. Make sure call light is within reach.
   10. Many health care facilities leave side rails down on one side for clients who can safely transfer without help.
   11. At times, half side rails are used.

B. Safety jacket or vest

   1. Canvas or mesh vest with tails that are crossed and tied behind the client's chair or tied to the movable portion of the bed frame should never be attached to bed side rails.
   2. Never use while client is on a bedside commode or toilet.
   3. Avoid wrinkles or knots that may exert pressure on the client's skin.
   4. Check and exercise client as directed by charge nurse. Never go longer than 30 minutes without checking jacket. Exercise client at least every two hours.

C. Safety belt

   1. Canvas or cloth strap large enough to be placed around the client's waist and tied to the movable portion of the bed frame on both sides
   2. Serves the same function as safety vest; used for same reasons

3. Check skin for any signs of pressure: discoloration of skin, indentations, redness

4. Check and exercise client as directed by charge nurse. Never go longer than 30 minutes without checking belt. Exercise client at least every two hours.

D. Wrist or ankle restraints

1. A soft-type cloth such as linen or muslin is used to form a strap that slips on the wrist or ankle and ties to the bed frame. Padding should be placed on the limb before applying restraint to prevent skin irritation.

2. Use only as directed by charge nurse.

3. A thorough explanation should be given to the client before applying the restraint.

4. Apply the restraint in such a manner that the client will not tighten it if he/she pulls on it.

5. Check and exercise client as directed by charge nurse. Never go longer than 30 minutes without checking restraint. Exercise client at least every two hours.

6. Check circulation for impairment due to a restraint that is applied too tightly. Also check to be sure the limb is not restrained in an abnormal position.

7. Signs of impaired circulation

    a. Blueness

    b. Pallor

    c. Skin is cool or cold to touch

    d. Client complains of tingling sensation

8. Restore circulation if any of the above signs are noted by loosening restraint and exercising and gently massaging limb.

E. Mittens

1. A device made of soft material that completely covers the hand; it prevents grasping but does not restrict movement.

2. Check circulation as stated for wrist or ankle restraints.

3. Check and exercise client as directed by charge nurse. Never go longer than 30 minutes without checking mittens. Exercise client at least every two hours.

IX. Problems or Behaviors that May Occur When Restraints are Applied **(II-9)**

A. Restraints or safety devises are one of the biggest causes of immobility in long-term care facilities. Immobility causes:

1. Skin break down
2. Decreased circulation to an area
3. Loss of muscle tone
4. Stiff joints

B. Client may become:

1. Hostile
2. Disoriented
3. Agitated
4. Withdrawn
5. Despondent; loss of the will to live

X. Health Care Assistant's Responsibilities if Restraints Are Used: **(II-10)**

A. Always check with charge nurse before applying a restraint. An order for restraints must be obtained from the physician by the charge nurse.

B. Report to charge nurse all client behavior so it can be documented.

C. Document all alternatives that were tried.

D. Follow the manufacture's directions when applying a restraint.

E. Check the client at least every 30 minutes.

F. Restraints are released every two (2) hours.

1. If possible, assist the client to walk.
2. For a client who cannot ambulate, do passive range of motion exercise.
3. Assist client to the bathroom or offer the bedpan.

4. Make certain the client is clean and dry. Give skin care.

G. Check the client's skin for redness, skin break down, and irritation.

H. Give fluids.

I. Place the call light within reach of the client.

J. A geriatric chair (geri-chair) is a rolling chair with a high back that has a removable tray. It should not be pushed too tightly against the client's waist.

K. Put padding on any skin area that may be irritated by application of the restraint.

L. Give the client the most movement possible, but still ensure safety. Secure ties where the client cannot reach them and undo them.

M. Ask client and family to notify the nursing staff if the restraint is causing discomfort.

N. Provide pillow props (positioning of soft props) as needed to assure good body alignment.

XI. Safety Measures for the Environment **(II-11)**

A. Clean up untidy conditions in the client's room.

B. Keep all walkways free of hazards, such as shoes, chairs, and bed cranks.

C. Wipe up spills according to facility policy. Post a "Wet Floor" sign if needed while it is drying.

D. Encourage use of handrails and grab bars in the shower, bathroom, and hallways.

E. Examine wheelchairs, shower chairs, geri-chairs, walkers, and other equipment for broken parts; if any are found, report to charge nurse.

F. Never handle electrical equipment with wet hands or near water.

G. Report extension cord use to charge nurse.

H. Inspect cord and plugs for fraying or defects before plugging in. Never place cords over client.

I. Report any equipment that causes electrical shock when handled.

J. Post emergency phone numbers near each telephone.

K. Leave articles such as water glasses, wipes, and signal devices within reach of client.

L. Provide adequate lighting.

M. Keep hallways clear. NEVER place anything in front of a fire extinguisher.

XII. Summary and Conclusion

A. Causes of accidents

B. Client conditions that require specific safety measures

C. Falls

D. Fires and burns

E. Poisoning

F. Safety measures for all clients

G. Reasons for using safety devices

H. Safety devices and restraints

I. Problems or behaviors that may occur when restraints are applied

J. Health care assistant's responsibilities if restraints are used

K. Safety measures for the environment

As a health care assistant, you have the responsibility of providing safety for your clients. Keep these factors in mind every minute while at work. It is extremely important because so many of your clients are dependent upon you to meet this basic human need. The next lesson is on fire, natural disasters, and other emergencies.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

INTERACTION ITEMS:

1. What are some causes of accidents?
2. What type of clients may require more frequent observance of safety factors?
3. What can the health care assistant do to prevent falls?
4. What can the health care assistant do to prevent fires and burns?
5. What can the health care assistant do to help prevent poisoning?
6. When taking care of client what are some safety measures to keep in mind?
7. What are some reasons for applying a restraint?
8. How are safety devices used: bed side rails, safety jacket or vest, safety posey belt, wrist or ankle restraints, mittens, transfer belt, and hydraulic lift?
9. What type of problems or behaviors may occur when a client is restrained?
10. What are the health care assistant's responsibilities when restraints are used?
11. What safety measures are necessary for a safe environment?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have students restrained during class with various restraints.
2. Have students locate brakes on beds, wheelchair, geri-chair, and shower chairs and apply brake and release.
3. Demonstrate application of each type of restraint.
4. Have students practice applying restraints on each other.
5. Discuss students' feelings about being restrained.
6. Have a class discussion on alternatives to restraints.

ANSWERS TO EVALUATION ITEMS:

1. d

2. The student may list any two of the following:
   a. Confused
   b. Elderly
   c. Client sedated with drugs
   d. Unconscious

3. b
4. a
5. c
6. b
7. a
8. c
9. 30
10. c
11. a
12. b
13. b
14. c
15. a
16. d
17. T
18. T
19. F
20. T
21. T
22. F
23. T
24. F
25. F
26. T
27. T
28. F
29. T
30. c

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

EVALUATION ITEMS:

1. Some common causes of accidents include all but one of the following. Which one of the following is not a common cause of accidents? (Circle the letter of the best answer.)

   a. Loss of balance
   b. Change in furniture arrangements
   c. Unlighted halls
   d. Excessive weight gain

2. List two client conditions that may require specific safety measures.

   a.______________________________

   b.______________________________

Match the following types of accidents in Column II with measures of prevention health care assistants can take in Column I.

	Column I		Column II
___ 3.	Reports client seen with matches or lighters.	a.	Falls
___ 4.	Wipe up spills immediately.	b.	Fires & burns
___ 5.	Keep harmful liquids out of the reach of clients.	c.	Poisoning
___ 6.	Do not use electrical equipment around oxygen.		
___ 7.	Answer signal lights promptly.		
___ 8.	Immediately report unlocked medication room.		

9. Clients wearing restraints should always be checked and exercised as directed by charge nurse. Never go longer than ______ minutes without checking the restraint. Exercise the client as least every two hours. (Fill in the blank.)

10. Nursing care measures for client safety are: (Circle the letter of the best answer.)

  a. Keep the bed in the high position at all times.
  b. Bed brakes should be in the unlocked position.
  c. Place signal light within reach of the client at all times.
  d. Allow clients to smoke in any area they choose.

11. Which of the following is a reason for using a safety device or restraint? (Circle the letter of the best answer.)

  a. To ensure client's safety
  b. To ensure you know where the client is at all times
  c. To make your job easier
  d. To make family feel better

12. All of the following except one are true statements concerning bed rails. Which statement is false? (Circle the letter of the best answer.)

  a. Bed rails are used for clients who are blind, confused, unconscious, or sedated.
  b. Bed rails must always be up when giving the client care.
  c. Bed rails do not prevent the client from climbing out of bed.
  d. Bed rails must be securely attached to the bed.

13. The client who has a wrist or ankle restraint should be checked for signs of impaired circulation. Signs of impaired circulation are: (Circle the letter of the best answer.)

  a. Skin warm to the touch
  b. Blueness and pallor of the skin
  c. Dizziness
  d. Flushed skin

14. A mitten prevents: (Circle the letter of the best answer.)

  a. Movement of the thumb and fingers
  b. Movement of the thumb
  c. Grasping
  d. Circulation to fingers

15. All of the following are true statements concerning OBRA regulations in regard to restraints except one. Which one of the following statements is false? (Circle the letter of the best answer.)

  a. Restraints may be applied if the health care assistant feels they are needed.
  b. Other alternatives to restraints must be tried, documented, and be unsuccessful before restraints are applied.
  c. A written consent from the client, guardian, or family must be obtained before applying restraints.
  d. Restraints may be used only as a last resort.

16. Safety measures for the environment include: (Circle the letter of the best answer.)

   a. When you see spilled water in the hallway, ask house keeping to clean it up.
   b. Leave water pitcher and water glass on the window sill.
   c. Keep lighting in the room off or low to prevent glare.
   d. Encourage use of handrails and grab bars in the shower, bathroom and hallway.

For each of the following, write "T" if the statement is true, or "F" if it is false.

____ 17. Keeping the bed in the lower position will decrease the danger of falls.

____ 18. Pillow props should be used to assure good body alignment.

____ 19. Bed brakes should be unlocked at all times.

____ 20. Allow the client to adjust from a lying down (supine) to sitting up position before transferring to a chair.

____ 21. The manufacture's directions should be followed when applying a restraint.

____ 22. It is not appropriate to lower a side rail while you are working at that side of the bed.

____ 23. A physician's order is needed to apply restraints unless it is an emergency situation.

____ 24. The more restraints the health care assistant can use on a client, the better protected he/she will be.

____ 25. No explanation should be given to clients when applying restraints because this makes them harder to control.

____ 26. Clients should be allowed as much movement as possible but kept within limits of safety.

____ 27. Extra padding should be used if the client's skin is very thin.

____ 28. Only housekeeping tidies up the client's room.

____ 29. Wipe up any spills on the floor immediately.

30. When a client is restrained, he/she may become: (Circle the letter that corresponds to the best answer.)

   a. Agitated and cheerful
   b. Excited and hostile
   c. Disoriented and withdrawn
   d. Despondent and tough

ALTERNATIVES TO RESTRAINTS

Seating

1. Comfortable, well-fitted chairs. (Consult with O.T. and/or P.T. for input for proper seating.)

2. Soft, comfortable, wing-chairs will often provide similar relaxation for the anxious client.

3. Wheelchairs should be used for transportation only. If a client is not able to propel wheelchair independently, he/she should be seated in it only for transport purposes.

4. Vary the locations where an individual sits. Sometimes quiet areas are appreciated, but often clients want to be "where the action is".

5. Sturdy rocking chairs may help fill need for constant motion (Vestibular Stimulation).

6. Foam, wedge-shaped seat cushions will often keep the client from sliding out of chair. (Be sure the thickest edge is at front of chair.)

7. Geri-chairs are restraints and a complete assessment must be done before using them.

Activities

1. Occupy much of your clients' waking hours with scheduled activities. Provide a purposeful routine in their lives - O.T., P.T., recreation, special sessions for special needs.

2. Provide planned, daily exercise individualized to the client's needs. This may include walks and/or other outside activities.

Wandering

1. Accept the fact that restless, anxious clients must be allowed to walk when able. Make the environment as safe as possible and allow them freedom to move about.

2. Sometimes one-on-one attention is necessary while working through a crisis. Enlist all facility staff to do their part in keeping track of a wandering client. It's not just a nursing responsibility! Give a staff member the responsibility for a wanderer in small blocks of time. Anyone can do it for short periods. It's a very tiresome, frustrating job for long stretches, and the caregiver will lose interest.

3. Placing a bright yellow barrier strip across the doorway of an alert client will often deter a wandering client from entering the room. Always get permission from the alert client to place the barrier strip.

Sleeping

1. Hi-Lo beds which can be lowered close to the floor are very important.
2. Side rails are usually considered restraints. Often they provide security and can be used as grab bars for turning in bed. One-half or three-quarter side rails are best for preventing the necessity of climbing over rails or foot boards to get out of bed. It may be necessary to pad the floor area if there is a risk of the client falling from the bed.
3. In severe situations, consider putting the mattress on the floor and making the bed there. Only in severe situations.
4. Understand that sleep often does not come easily as we grow older, and if it doesn't, it's very difficult to remain in bed. Caring for older people means some clients will be awake and out of bed during the night.
5. Certain electronic bed checking systems can alert the nurse when a client is trying to get out of bed. Some facilities have used it with success.

Environment

1. Allow clients to surround themselves with furniture and possessions which are of personal importance. This helps in recognition of their room and provides a comfortable, secure haven in an often strange environment.
2. Full length mirrors at exit points sometimes distract the wanderer.
3. Provide handrails on both sides of toilet.
4. Remove wheels from over bed table if client leans on it for support. If this is not possible, remove it from the room.
5. A raised toilet seat often makes transfers easier.
6. Eliminate, or at least reduce, the use of public address or paging systems. Voices coming over these systems are stressful and confusing for frail clients.

Falling

1. Be sure the client wears comfortable, well-fitted shoes.
2. Constantly monitor your facility for safety hazards.
3. Provide O.T. and P.T. regularly to maintain strength and to identify risks.

Relationships: Nurse-Client-Family

1. It is important to organize the nursing staff in a way that a client has the same caregiver week after week. In this way, the caregiver knows the needs of the clients he/she cares for and provides valuable input for an individualized plan of care.

2. Maintain good, caring relationships with client's family and include their input in the client's plan of care. Family members also provide valuable insights in understanding client behavior.

3. Understand that each client is an individual with his/her own personal needs. Care must be "customized" for the client's particular situation. What works for one situation may not work for another. Keep trying, that's our mission as caregivers.

Adapted from: *Untie the Elderly - Quality Care without Restraints.* Senate Print 101-90, U.S. Senate Special Committee on Aging, 1990.

SAFETY GUIDELINES: INFANT THROUGH ADOLESCENTS

Safety Guidelines for Infants

- Crib side rails must be up at all times
- Keep one hand on the infant when side rails are down. Don't take your eyes off the infant.
- Use crib bumpers or rolled blankets to prevent injuries.
- Don't lay infant on abdomen to sleep.
- Keep toys with small removable parts or pointed objects away from infants.
- Never tie balloons on cribs.
- Never prop bottles up for the infant to suck.
- Never tape pacifiers in an infant's mouth.
- Restraints for Infants
  - An infant is considered to be incompetent. A Doctor's order is not necessary to restrain an infant.
  - Restraints are only used to protect the infant. Restraints are never tied to the crib side rail, tie to the crib frame.

Safety Guidelines for Toddlers (age 1 to 3 years)

- Keep medication and anything poisonous in a locked cabinet out of reach of the toddler.
- Always remain with the toddler when they are in the bathroom or bathtub.
- Keep side rails up at all times.
- Do not give toddlers balloons to play with.
- Do not let toddlers play with toys that have removable parts, strings, or sharp points.
- Keep doors to stairs and medication and treatment rooms locked whenever possible.

Safety Guidelines Preschool Child. (age 3 to 6 years)

- Keep side rails up when child is in bed.
- Bed should always be in the low position.
- Pick up toys to prevent falls.
- Keep doors to storage rooms and kitchen closed.
- Stay with child when in the bath tub.
- Don't allow children to run with anything (e.g., suckers, pencils) in their mouths.

Safety Guidelines for the School Age Child (age 6-12 years)

- Keep cleaning solution and poisonous materials out of reach.
- Keep bed in low position and side rails up when child is in bed.
- Don't allow children to play with dangerous toys, guns, or knives.

Safety Guidelines Adolescents

- Check all electrical equipment (hair dryer, razor, radio, etc.) that they bring with them to the hospital. Make certain the equipment meets all hospital guidelines.
- Review facility policies regarding smoking, alcohol, and drugs.
- Remind them to tell you if they leave their room.
- Keep bed in low position.

RESTRAINTS

I. Physical Restraints - Physical restraints are any manual method or physical or mechanical device, material, or equipment attached or adjacent to the client's body that the individual cannot remove easily which restricts freedom of movement or normal access to one's body.

  A. Examples
    1. Waist
    2. Vest
    3. Belt
    4. Pelvic
    5. Wrist
    6. Geri-Chair
    7. Mitt
    8. Pelvic Rollbar
    9. Houdini
    10. Halters
    11. Full side rails (which are used to restrain rather than enable)
    12. Merry Walker®

  B. Purpose - prevent violence or harm to oneself or others

  C. When not to use restraints
    1. Punishment
    2. Instead of additional staff
    3. Convenience
    4. Because of custom or based on fear
    NOTE: Consideration of litigation varies from site to site and should not be the justification for use of restraints as an automatic measure

  D. Regulations vary from long-term to acute care. Check with your facility to determine its policies.

II. Chemical Restraints - Psychoactive drugs should never be used for discipline or convenience.

III. Passive Physical Restraints - A physical appliance which is adjacent to but not bodily attached to the client but does restrict some freedom of movement and may restrict normal access to certain parts of one's body.

  A. Examples
    1. Wheelchair roll bars
    2. Geri-chair with tray

  B. Wheelchair/Geriatric Chair - Safety bar kits may or may not be considered restrictive devices. Many "Restraint-free" facilities use bars with non-locking closures to help provide security without restraints.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

SCOPE OF UNIT:

This unit covers all areas of safety. It refers to specific measures to be aware of regarding clients, the environment, particular safety devices, as well as the role of the nurse assistant in fire and disaster safety and using body mechanics to position the client.

INFORMATION TOPIC: III-2 AND DEMONSTRATION: III-2

FIRE, NATURAL DISASTERS, AND OTHER EMERGENCIES
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

Information

1. Match terms presented in this lesson to correct definitions.
2. Identify methods of fire prevention.
3. Describe what to do in case of fire.
4. Distinguish between a tornado watch and a tornado warning.
5. Discuss what actions should be taken should an earthquake occur.
6. Identify steps to control hemorrhage from a cut.
7. Explain the proper steps to follow should a client fall.
8. List observations that should be made during a seizure.
9. Identify precautions to avoid choking while feeding a client.
10. Describe cardiopulmonary resuscitation, CPR.

Demonstration

11. Clear airway of obstruction in conscious adult or child client according to steps of procedure.
12. Clear airway of obstruction in conscious infant client according to steps of procedure.

13. Clear airway of obstruction in unconscious adult or child client according to steps of procedure.

14. Clear airway of obstruction in unconscious infant client according to steps of procedure.

15. Perform cardiopulmonary resuscitation (CPR).

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Moving Client to Safety
2. HO 2: Safely Handling a Falling Client
3. HO 3: First Aid for the Choking Victim (Adult)
4. Fire extinguishers
5. Facility floor plan
6. CPR equipment

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 2 prior to class and be prepared to discuss the information presented and return the demonstrations.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 33.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 29, Section 9.

Safety Tips for Earthquakes. Federal Emergency Management Agency, July, 1982.

Summer, Sara. "An Update on BCLS Standards." *Nursing '86*, (November 1986), pp 48-49.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 2, Section 1.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 7.

INTRODUCTION:

The health care assistant must be aware of what to do if faced with a disaster or emergency. Many times we do not think about these things beforehand. It is necessary for you to concentrate on this information since these are not everyday occurrences. An emergency requires quick action, and clients depend upon you for assistance and reassurance.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

OUTLINE:

I. Terms and Definitions (II-1)

  A. Cardiopulmonary resuscitation - an emergency procedure used to establish effective circulation and respiration to a victim whose heart has stopped beating

  B. Emergency - an event that calls for immediate action

  C. Extremities - the arms, legs, hands, and feet

  D. Hazard - a source of potential danger

  E. Hemorrhage - excessive, uncontrolled bleeding

  F. Immobile - unable to move

  G. Impairment - that which hinders proper function

  H. Incident - an unusual event or occurrence

  I. Obese - extremely fat

  J. Obstruction - a blockage

  K. Oxygen - a colorless, odorless gas that is essential for breathing

  L. Seizure - sudden, periodic attacks of muscles contracting and relaxing

  M. Supine - lying on one's back

  N. Unconscious - an individual's lacking in awareness

  O. Ventilate - give air to

II. Fire Prevention (II-2)

  A. Smoking is the number one cause of fires in health care institutions.

  B. You must know smoking regulations of the health care facility.

  C. Never empty ashtrays into any container that may contain flammable materials.

  D. Allow smoking only under supervision and in approved areas.

E. Study and understand the fire evacuation plan.

F. Know the facility's floor plan and location of all fire alarms.

G. Know locations of fire extinguishers and how to use each type.

H. Never prop open a fire door.

I. Participate in fire drills.

J. Exits and fire extinguishers should be clearly designated and not obstructed.

K. Report any fire hazards you find to charge personnel immediately. Example - cluttered halls.

L. Do not use extension cords except as a temporary measure and then for only one appliance and not more than six feet in length.

M. Have scissors within easy reach to remove safety devices in case of an emergency.

N. Know precautions needed for storage and use of oxygen.

O. Use proper precautions with combustible cleaning compounds.

P. Follow facility policies regarding lights, Christmas trees, appliances, etc.

III. In Case of Fire **(II-3, 4)**

A. Use the R.A.C.E. system in the case of a fire.

1. R - Remove all patients or personnel near the fire.

2. A - Activate the alarm and notify other staff members that there is a fire.

3. C - Contain the fire and smoke by closing all doors in the area.

4. E - Extinguish the fire if it is small. If not, allow the fire department to extinguish it. Use the following for extinguishing a small fire.

a. Water - used for ordinary combustible fires

b. Chemical - used for flammable liquid fires and electrical equipment fires

c. Foam - used for flammable liquid fires

B. Evacuation instructions

1. Clients near fire or smoke must be evacuated first.

2. Remove ambulatory clients first, then wheelchair clients, and then the bedridden clients last.

3. Be able to perform various client carries. (HO 1)

4. Your primary concern and first responsibility is always the clients' safety.

5. A staff member must remain with the evacuated clients to prevent any of them from re-entering the facility.

C. Remember, the first five minutes of a fire are more critical than the next five hours.

D. Cover mouth and nose with wet washcloth or towel to reduce smoke inhalation.

E. Never use an elevator during a fire.

IV. Tornado Safety **(II-5, 6)**

A. The average tornado lasts from eight to ten seconds.

B. Hail often immediately precedes a tornado.

C. Tornado watch

1. Is announced when conditions are such that a tornado may develop. Be very alert if you hear there is a tornado watch.

2. Radio and/or television should be on and someone assigned to listen to local station for weather reports.

3. Flashlights should be secured and all staff members aware of weather conditions.

4. Proceed with the following as requested by the charge nurse:

a. Clear window sills of all objects; put all heavy, sharp, or glass objects and plants in closets or drawers.

b. If clients are up in chairs, do not put them back in bed.

c. Move bedridden clients into chairs, or put overbed table and blanket next to the bed so they can be positioned over the client's face when needed.

d. Check outside areas for loose objects such as chairs, vases, garden tools, etc., and bring them inside.

e. Close doors to client rooms securely; close fire doors to prevent wind-tunnel effect in halls.

D. Tornado warning

1. Occurs when a tornado has been identified within the local area of a community. Be extremely alert if you hear there is a tornado warning.

2. Alarms will be sounded.

3. Clear all large rooms (dining room, activities room, etc.) of all clients and staff personnel.

4. Move all clients into hallways near exits or into closets, or away from windows.

5. Bedridden clients may remain in bed--push the bed against the door wall; pull window curtains and privacy curtains. Extra blankets should be applied.

6. Close doors to client rooms securely; close fire doors.

7. Do not block any doorways to hall, fire doors, or exit ways.

8. Cover clients in hallways with blankets or bedspreads to protect them from flying glass.

9. Continue to monitor weather reports.

E. After tornado

1. Restore calm to clients.

2. Check all clients for injuries and other ill effects.

3. Check for fires throughout the facility.

4. Follow charge nurse's instructions.

V. Earthquake Safety **(II-7)**

A. During an earthquake, the "solid" earth moves like the deck of a ship. The actual movement of the ground, however, is seldom the direct cause of death or injury. Most casualties result from falling objects and debris because the shocks can shake, damage, or demolish buildings. Earthquakes may also trigger landslides or cause fires.

B. If an earthquake occurs, try to STAY CALM. Think before you act and stay where you are. During the actual earthquake, you will be unable to help clients. Protect yourself so you can help them later.

1. If inside, stay there; take cover under a heavy object like a desk, table, or bench, in a supported doorway, or along an inside wall. Do not use

candles, matches, or other open flame either during or after the tremor because of possible gas leaks.

2. If outside, stay there; move away from buildings and utility wires. The greatest danger from falling debris is just outside doorways and close to outer walls. Once in the open, stay there until the shaking stops.

C. After the earthquake

1. Be prepared for additional earthquake shocks.

2. Check for injuries. Do not attempt to move seriously injured persons unless they are in immediate danger of further injury.

3. Listen to the radio or television to get the latest emergency information from local authorities.

4. Do not touch downed power lines or objects in contact with downed lines.

5. Immediately clean up spills according to facility procedure.

6. Use the telephone only for genuine emergency calls.

VI. Hemorrhage - If client falls and cuts himself/herself and is bleeding in large amounts, follow these steps: **(II-8)**

A. Call for help as you go to the client.

B. Apply firm pressure with gloved hand to the bleeding area.

C. Stay with client until more help comes.

D. If the injury is to an arm or leg, and you can move the arm or leg without causing further injury, raise the bleeding site above heart level to slow down the blood coming to the area.

E. If the client is standing up, assist her/him to lie on a bed, couch, or on the floor so she/he does not faint from blood loss and fall to the floor.

F. Do not apply a tourniquet.

G. Follow directions given by the charge nurse.

VII. Falls **(II-9)**

A. If client falls while he/she is unattended:

1. Call for help immediately.

2. Do not move client until the charge nurse has assessed injuries. Some injuries may require that the client remain on the floor until paramedics arrive. Be calm, let the client know help is on the way. Stay with the client.

3. Check for swelling, bruising, position change of any extremities, complaint of pain, and promptly report to charge nurse.

4. Assist charge nurse by checking vital signs.

5. Assist charge nurse in moving client--may need as many as four or five people, depending on the size of the client and location of injury. Support client and hold securely when moving.

B. If client falls while attended by a health care assistant: (HO 2)

1. Do not try to prevent the fall, do try to prevent injury.

2. Use your body in the following steps: **(II-9)**

   a. Remember body mechanics - feet apart, back straight

   b. Pull client close to you - hold on to him/her using gait belt or by wrapping your arms around his/her waist.

   c. Lean the client onto your leg as you go down to the floor with him/her.

   d. Gently lower yourself and the client to the floor, keeping your back straight.

   e. Prevent the client's head from hitting the floor.

   f. Call for help immediately.

   g. Do not move the client until examined by charge nurse.

VIII. Seizures

A. A seizure is a convulsion - sudden, periodic attacks of muscles contracting and relaxing.

B. Follow these steps if you think a client is having a seizure.

1. Clear the area around the client of anything hard or sharp.

2. Loosen anything around his/her neck that may make breathing difficult.

3. Put something flat and soft under his/her head.

4. Turn the client gently on his/her side--helps keep airway clear. Do not try to force his/her mouth open with any hard object or with your fingers. A person having a seizure cannot swallow his/her tongue, and efforts to hold his/her tongue down can injure the teeth or jaw.

5. Do not hold the client down or try to stop his/her movements.

6. Stay with the client until the seizure has ended.

7. Observe, note, and report the following: **(II-10)**

    a. Time seizure started and how long it lasted

    b. If the seizure started at a certain area of the body or was generalized from the start

    c. If the client was incontinent

IX. Choking **(II-11)**

A. Cause in elderly

1. Elderly are more prone to choking due to weakened muscles of the mouth and throat.

2. Food, saliva, or medication can cause a blockage of the respiratory tract.

3. Improperly fitting dentures or no dentures can make chewing difficult. Large pieces of food can easily slip down the throat.

4. Following a stroke there may be diminished gag and swallowing reflexes.

B. Take the following precautions to avoid choking when feeding a client:

1. Cut food in small pieces.

2. Do not rush client; allow him/her time to chew the food thoroughly and swallow it before giving more.

3. Make sure dentures are in place and fit well.

C. If choking occurs:

1. Act quickly.

2. Start Heimlich maneuver.

3. In recent years, the Heimlich maneuver included the use of back blows when partial or complete airway obstruction was present.

    a. It is no longer recommended for children or adults when complete airway obstruction is present.

    b. Only recommended for infants who can be placed in the head down position.

D. Assess if there is obstruction.

  1. Ask client if he/she is choking.

  2. Ask client if he/she can speak.

  3. Tilting the head back can sometimes clear the airway. This position pulls the tongue forward.

  4. If the client can speak or is coughing, do not intervene.

    a. Coughing is the most effective way to dislodge material from the airway.

    b. Stay close and encourage coughing.

    c. Starting the Heimlich maneuver at this point may cause him/her to breathe in harder and force the object further down in the respiratory tract.

    d. If at any point the client develops difficulty breathing or is unable to cough or speak, start the Heimlich maneuver.

    e. The Heimlich maneuver is usually sufficient to "pop" the obstructing object out of the client's airway. The maneuver forces air out of the lungs pushing the object out with it.

X. Cardiopulmonary Resuscitation - CPR

  A. A life saving procedure.

  B. Given when a person's heart suddenly stops.

  C. Technique must be taught by a certified instructor.

  D. The following are important parts of the procedure. They DO NOT replace the course.

    1. Shout, "are you all right" as you shake the victim.

    2. Turn victim on back.

3. Open airway - observe for breathing.

4. Use mouth-to-mouth breathing using appropriate device. Give two full breaths.

5. Feel for carotid pulse.

6. Begin chest compression if there is no pulse.

7. Kneel beside victim's shoulders.

8. Position hands. Which hand goes on the bottom depends upon where you are positioned next to the client's body.

    a. Locate the xiphoid process (tip of the sternum) with the lower hand.

    b. Place heel of upper hand over lower portion of sternum.

    CAUTION: Do not place heel of hand on tip of sternum or over ribs.

    c. Place lower hand over upper hand.

    d. Keep elbows straight.

    e. Compress sternum downward.

    f. Continue compressions at a rate of 80-100 per minute. If only one person is doing CPR, do 15 compressions to 2 breaths per minute.

XI. Demonstrate Procedures for Clearing Airway of Obstruction and Performing CPR. (HO 3) **(II-12 - 19)**

XII. Summary and Conclusion

A. Terms and definitions

B. Fire prevention

C. In case of fire

D. Tornado safety

E. Earthquake safety

F. Hemorrhage

G. Falls

H. Seizures

I. Choking

J. Cardiopulmonary resuscitation - CPR

K. Review procedures for clearing airway of obstruction and performing CPR.

This information is fresh in your mind, and you would probably be able to respond appropriately and quickly if faced with any of the situations mentioned. It is important, though, for you to review this lesson plan periodically because in six months to a year from now it will not be as fresh in your mind. To perform in a safe manner you must be acquainted with the proper way of handling all of these situations. The next lesson is on body mechanics.

STEPS OF PROCEDURE FOR CLEARING AIRWAY OBSTRUCTION IN A CONSCIOUS ADULT OR CHILD CLIENT:

1. Call for help as you approach the client.
2. Tell the client you are going to help.
3. Determine if the client is choking. Ask the client if he or she can speak or cough.
4. Position yourself behind the client if the client is standing or sitting.
5. Slide your arms under client's arms, wrapping both of your arms around client's waist.
6. Make a fist and place thumb side of this fist against the midline of the client's abdomen, just above the navel.

   NOTE: Keep your fist below the client's rib cage, and avoid the area just below the sternum.
7. Grasp your fist with free hand.
8. Apply pressure as an inward and upward thrust.
9. Deliver abdominal thrusts until obstruction is clear or when client becomes unconscious or when medical support arrives.

STEPS OF PROCEDURE FOR CLEARING AIRWAY OBSTRUCTION IN A CONSCIOUS INFANT CLIENT:

1. Call for help as you approach the infant.
2. Determine airway obstruction.
3. Place the infant face down over your arm with the head lower than the trunk, supporting the head and neck with your hand.
4. Rest your forearm on your thigh.
5. With the heel of your other hand rapidly give five back blows between the infant's shoulder blades.
6. Position the infant face up over your arm with the head lower than the trunk, supporting the head and neck with your hand.

7. Rest your forearm on your thigh.

8. Using the first two fingers of your other hand, place fingertips on the sternum between the nipples. Gently but firmly give five thrusts.

9. Repeat the blows and thrusts until the object comes out or when the infant becomes unconscious or until medical support arrives.

STEPS OF PROCEDURE FOR CLEARING AIRWAY OBSTRUCTION IN AN UNCONSCIOUS ADULT OR CHILD CLIENT:

1. Call for help as you approach the client.

2. Check for unresponsiveness and no breathing.

3. Turn client on back.

4. Put on gloves.

5. Open airway by tipping head back and lifting jaw. Look, listen, and feel for breathing.

6. Insert mouthpiece. Pinch nostrils closed. Attempt breathing. (2 full breaths)

7. Re-open airway.

8. Insert mouthpiece. Attempt breathing.

9. Provide five abdominal thrusts (Heimlich maneuver).

    a. Straddle client at the level of the hips.

    b. Position the heel of one hand on the client's abdomen at the midline, between the navel and rib cage.

       NOTE: Fingers should point toward the client's chest.

    c. Keep hands below client's rib cage avoiding the area just below the sternum.

    d. Place free hand over the positioned hand and put your shoulders directly over the client's abdomen.

    e. Press hands inward and toward client's diaphragm, as if you are trying to push toward the client's upper back.

10. Check for foreign object.

    a. With face up, open mouth and gently grasp tongue and jaw between thumb and index finger. Draw tongue forward. Do not let mouth close.

    b. Insert index finger of other hand down along side of cheek toward the base of the tongue (only in an adult). Do finger sweep in a child only if object is visible.

  c. Sweep around mouth. Bend finger into a hook and attempt to bring foreign object up into the mouth if you can see it.

CAUTION: Do not force object further into the throat.

  d. If possible, remove object from mouth.

11. Re-open airway. Insert mouthpiece. Attempt breathing.
12. Repeat procedures until airway is cleared and life support is available.
13. Remove gloves and dispose in appropriate container. Wash hands.

STEPS OF PROCEDURE FOR CLEARING AIRWAY OBSTRUCTION IN AN UNCONSCIOUS INFANT:

1. Call for help as you approach the infant.
2. Check for unresponsiveness and no breathing.
3. Turn infant on back.
4. Put on gloves.
5. Open airway by tipping head back and lifting jaw. Look, listen, and feel for breathing.
6. Cover the infant's nose and mouth with your mouth. Blow two slow breaths gently into the infant's nose and mouth.
7. Re-open airway.
8. Attempt breathing again.
9. If air will not go in, place the infant face down over your arm with the head lower than the trunk.
10. Rest your forearm on your thigh.
11. With the heel of your other hand rapidly give five back blows between the infant's shoulder blades.
12. Position the infant face up over your arm with the head lower than the trunk, supporting the head and neck with your hand.
13. Rest your forearm on your thigh.
14. Using the first two fingers of your other hand, place fingertips on the sternum between the nipples. Gently but firmly give five thrusts.
15. Repeat the blows and thrusts until the object comes out or until medical support arrives.

16. Lift the tongue and jaw with you index finger. Look for foreign object

17. Remove gloves and dispose in appropriate container. Wash hands.

STEPS OF PROCEDURE FOR PERFORMING CPR:

NOTE: The instructor can only instruct CPR if he/she is a certified CPR instructor. Check with your local American Heart Association or Red Cross for more information.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III: SAFETY

INTERACTION ITEMS:

1. What are the definitions of seizure, unconscious, supine, hemorrhage, ventilate, obese, extremities, and obstruction?

2. What are some things that may cause a fire in the facility?

3. What is the first thing you do when you find a fire?

4. Whom do you evacuate first?

5. What is the difference between tornado watch and warning?

6. Have any of you ever been in a tornado? What was it like?

7. If you are in the facility during an earthquake, where would be a good place to take cover?

8. Why don't you apply a tourniquet?

9. What do you do if a client begins to fall while attended by you, the health care assistant?

10. What observations should be made during a seizure?

11. What are some things you do to help prevent choking while feeding a client?

12. Why don't you do abdominal thrusts on someone who can speak, cough, or breathe?

13. Why do you act immediately when the person cannot speak?

14. How do you hold the hands to do the abdominal thrusts?

15. When does the procedure stop?

16. What is the first step for clearing the airway in the conscious victim?

17. What is the first step for clearing the airway in the unconscious victim?

18. What is cardiopulmonary resuscitation?

19. What is the procedure for performing CPR?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have students demonstrate how to remove a bedridden client during a fire.

2. Have students locate fire alarms, extinguishers, and exits in the facility.

3. Demonstrate proper use of fire extinguishers.

4. Have students practice falling with another student (one as the health care assistant and the other as the client).

5. Instructor should demonstrate clearing airway obstruction in the conscious client.

6. Students should perform the procedure clearing airway obstruction in the conscious client.

7. Instructor should demonstrate clearing airway obstruction in the unconscious client.

8. Students should perform the procedure clearing airway obstruction in the unconscious client.

9. Class discussion of the following situation. You enter Mrs. Taft's room. There are some flames shooting up from a wastebasket, and they are igniting the bedspread. Mrs. Taft is in the bathroom. What steps will you take?

10. Class discussion of the following situation. You enter the room of Mr. Harris. You find him lying on the floor beside his bed. He is crying. What will you do?

11. Have students locate the rib cage and sternum on the anatomy diagram.

12. Have a certified CPR instructor demonstrate cardiopulmonary resuscitation.

ANSWERS TO EVALUATION ITEMS:

1. e
2. g
3. d
4. c
5. b
6. f
7. a
8. h
9. d
10. b
11. d
12. b
13. a
14. watch
15. warning
16. b

17. c
18. d
19. b

20. Time it started and how long it lasted. If seizure started at a certain area of the body or was generalized from the start. If the client was incontinent.

21. a
22. c
23. d

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

EVALUATION ITEMS:

Match the following terms in Column I to the correct definitions in Column II.

		Column I		**Column II**
____	1.	Seizure	a.	The arms, legs, hands, and feet
____	2.	Unconscious	b.	Give air to
____	3.	Supine	c.	Excessive uncontrolled bleeding
____	4.	Hemorrhage	d.	Lying on one's back
____	5.	Ventilate	e.	Sudden, periodic attacks of muscles, contracting and relaxing
____	6.	Obese	f.	Extremely fat
____	7.	Extremities	g.	An individual's lacking in awareness
____	8.	Obstruction	h.	A blockage

9. Which of the following is not a fire prevention safety point? (Circle the letter of the best answer.)

   a. Never empty ashtrays into any container which may contain flammable fluids.
   b. Allow smoking only under supervision and in approved areas.
   c. Know the location of fire extinguishers and how to use each type.
   d. Prop open fire door with a chair.

10. In case of a fire, which one of the following should you do first? (Circle the letter of the best answer.)

    a. Call for the charge nurse.
    b. Remove clients in danger.
    c. Call the fire department.
    d. Call Dr. Red over the loudspeaker.

11. As you leave a room where there is a fire, you: (Circle the letter of the best answer.)

    a. Close the windows
    b. Leave the door open
    c. Open the windows
    d. Close the door

12. The number one cause of fires in health care institutions is from: (Circle the letter of the best answer.)

    a. Faulty wiring
    b. Smoking
    c. Too many things plugged into one outlet
    d. Using flammable liquids around gas (from dryers, hot water heaters)

13. During a fire, when evacuating clients you should: (Circle the letter of the best answer.)

    a. Remove ambulatory clients first
    b. Remove wheelchair clients first
    c. Remove bedridden clients first
    d. Remove the client nearest you first

14. A tornado ________________ is announced when conditions are such that a tornado may develop.

15. A tornado ________________ occurs when a tornado has been identified within the local area of a community.

16. When a tornado warning alarm is sounded you should: (Circle the letter of the best answer.)

    a. Clear all dining and activity rooms of staff.
    b. Move clients into hallway near exits or into closets.
    c. Open all windows and fire doors.
    d. Get all clients back to bed.

17. During an earthquake you should: (Circle the letter of the best answer.)

    a. Move bed clients into the hallway.
    b. Move bed clients under the bed.
    c. Stay calm and stay where you are until the earthquake movement ceases.
    d. Close all doors and windows to lessen flying debris.

18. Which one of the following is a correct step to control hemorrhage from a cut? (Circle the letter of the best answer.)

    a. Run to the nurses station for the charge nurse
    b. Apply a tourniquet immediately
    c. If the cut is to an arm or leg, lower the bleeding site below heart level
    d. Apply firm pressure with a gloved hand to the bleeding area

19. If the client begins to fall while you are walking with him/her, you should: (Circle the letter of the best answer.)

    a. Get a blanket for the client immediately
    b. Very gently ease the client to the floor
    c. Call for a co-worker to bring you a pillow
    d. Leave the client to get help

20. List three observations to make if a client is having a seizure.

    a.____

    b.____

    c.____

21. Thrusts are not done when giving first aid to a choking victim who can speak, cough, or breathe because: (Circle the letter of the best answer.)

    a. It would force the victim to breathe in harder and force the object further down the respiratory tract.
    b. It would force the victim to "pop" the object out of their respiratory tract.
    c. It would force the victim to exhale.
    d. It would force the victim to vomit and force the object further down the respiratory tract.

22. To avoid choking when feeding a client, do all of the following except: (Circle the letter of the best answer.)

    a. Cut food in small pieces.
    b. Give manageable amounts of food at a time.
    c. Don't bother putting dentures in.
    d. Allow the client time to chew and swallow the food.

23. When performing cardiopulmonary resuscitation (CPR) you should: (Circle the letter of the best answer.)

    a. Turn the victim on his/her stomach.
    b. Feel for the radial pulse.
    c. Place heel of left hand on tip of breastbone.
    d. Place heel of the hand over lower portion of the sternum.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

EVALUATION ITEMS:

NAME OF STUDENT: ______________

CLEAR AIRWAY OBSTRUCTION IN A CONSCIOUS ADULT OR CHILD CLIENT

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Call for help as you approach the client.		
2. Tell the client you are going to help.		
3. Determine if the client is choking. Ask the client if he or she can speak or cough.		
4. Position yourself behind the client if the client is standing or sitting.		
5. Slide your arms under client's arms, wrapping both of your arms around client's waist.		
6. Make a fist and place thumb side of this fist against the midline of the client's abdomen, just above the navel.		
7. Grasp your fist with free hand.		
8. Apply pressure as an inward and upward thrust.		
9. Deliver abdominal thrusts until obstruction is clear or when client becomes unconscious or when medical support arrives.		

The student has satisfactorily completed the procedure "CLEAR AIRWAY OBSTRUCTION IN CONSCIOUS ADULT OR CHILD CLIENT" according to the steps outlined.

____

Instructor's/ Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

____

Date

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

EVALUATION ITEMS: NAME OF STUDENT: ______________

CLEAR AIRWAY OBSTRUCTION IN A CONSCIOUS INFANT

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Call for help as you approach the client.		
2. Determine airway obstruction.		
3. Place the infant face down over your arm with head lower than the trunk, supporting the head and neck with your hand.		
4. Rest your forearm on your thigh.		
5. With the heel of your other hand rapidly give five back blows between the infant's shoulder blades.		
6. Position the infant face up over your arm with the head lower than the trunk, supporting the neck and head with your hand.		
7. Rest your forearm on your thigh.		
8. Using the first two fingers of your other hand, place fingertips on the sternum between the nipples. Gently but firmly give five thrusts.		
9. Repeat the blows and thrusts until the object comes out or when the client becomes unconscious or until medical support arrives.		

The student has satisfactorily completed the procedure "CLEAR AIRWAY OBSTRUCTION IN CONSCIOUS INFANT" according to the steps outlined.

______________________________ ______________

Instructor's/ Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

EVALUATION ITEMS: NAME OF STUDENT: ______________

CLEAR AIRWAY OBSTRUCTION IN AN UNCONSCIOUS ADULT OR CHILD CLIENT

EQUIPMENT:

1. Gloves
2. Mouthpiece

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Call for help as you approach client.		
2. Check for unresponsiveness.		
3. Turn client on back.		
4. Put on gloves.		
5. Open the airway by tipping head back and lifting jaw. Look, listen, and feel for breathing.		
6. Insert mouthpiece. Pinch nose closed. Attempt breathing. (2 full breaths)		
7. Re-open airway.		
8. Insert mouthpiece. Pinch nostrils closed. Attempt breathing.		
9. Provide five abdominal thrusts (Heimlich Maneuver). a. Straddle client at the level of the hips.		
b. Position the heel of one hand on the client's abdomen at the midline, between the navel and rib cage.		
c. Keep hands below client's rib cage avoiding the area just below the sternum.		
d. Place free hand over the positioned hand and put your shoulders directly over the client's abdomen.		
e. Press hands inward and toward client's diaphragm, as if you are trying to push toward the client's upper back.		
10. Check for foreign object. a. With face up, open mouth and grasp tongue and jaw between thumb and index finger. Draw tongue forward. Do not let mouth close.		

	b. Insert index finger of other hand down along side of cheek toward the base of the tongue (only in an adult). Do finger sweep in child only if object is visible.		
	c. Sweep around mouth. Bend finger into a hook and attempt to bring foreign object up into the mouth if you can see it. CAUTION: Do not force object further into the throat.		
	d. If possible, remove object from mouth.		
11.	Re-open airway. Insert mouthpiece. Attempt breathing.		
12.	Repeat procedures until airway is cleared and life support is available.		
13.	Remove gloves and dispose in appropriate container. Wash hands.		

The student has satisfactorily completed the procedure "CLEAR AIRWAY OBSTRUCTION IN UNCONSCIOUS ADULT CLIENT" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion)

Date

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

EVALUATION ITEMS: NAME OF STUDENT: ______________

CLEAR AIRWAY OBSTRUCTION IN AN UNCONSCIOUS INFANT

EQUIPMENT:

1. Gloves

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Call for help as you approach the infant.		
2. Check for unresponsiveness and no breathing.		
3. Turn infant on back.		
4. Put on gloves.		
5. Open airway by tipping head back and lifting jaw. Look, listen, and feel for breathing.		
6. Cover the infant's mouth and nose with your mouth. Blow two slow breaths gently into the infant's nose and mouth.		
7. Re-open airway		
8. Attempt breathing again		
9. If air will not go in, place the infant face down over your arm with the head lower than the trunk.		
10. Rest your forearm on your thigh.		
11. With the heel of your other hand rapidly give five back blows between the infant's shoulder blades.		
12. Position the infant face up over your arm with the head lower than the trunk, supporting the head and neck with your hand.		
13. Rest your forearm on your thigh.		
14. Using the first two fingers of your other hand, place fingertips on the sternum between the nipples. Gently but firmly give five thrusts.		
15. Repeat the blows and thrusts until the object comes out or until medical support arrives.		
16. Lift the tongue and jaw with your thumb and index finger. Look for foreign object. Remove only if it is visible.		

17. Remove gloves and dispose in appropriate container. Wash hands.		

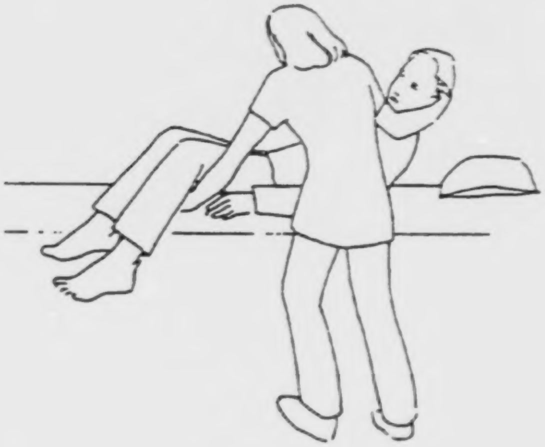
The student has satisfactorily completed the procedure "CLEAR AIRWAY OBSTRUCTION IN AN UNCONSCIOUS INFANT" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

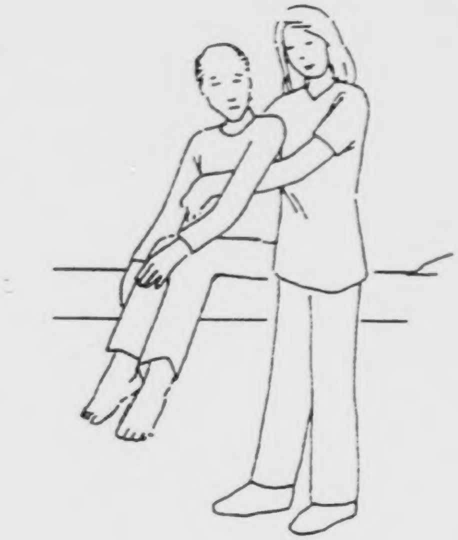
Date

HO 1

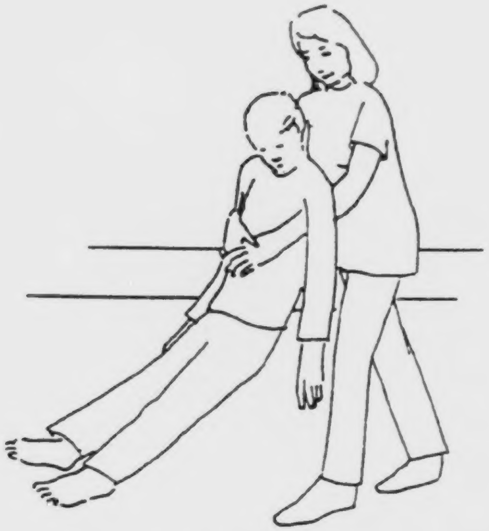
MOVING CLIENT TO SAFETY



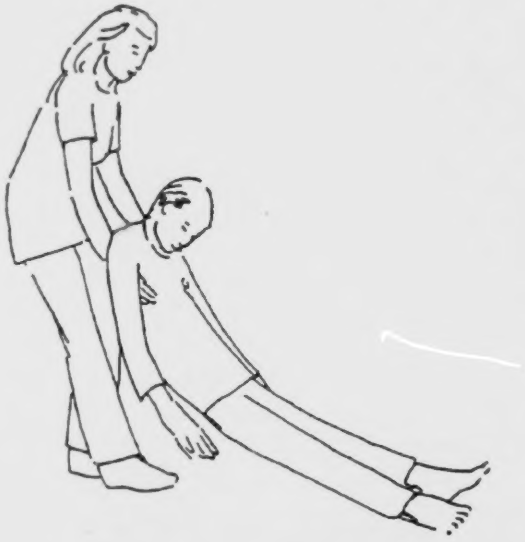
1. Lift client to a sitting position, legs over side of bed.



2. Grasp client from behind, under arms.



3. Slide client from bed, lower to floor.

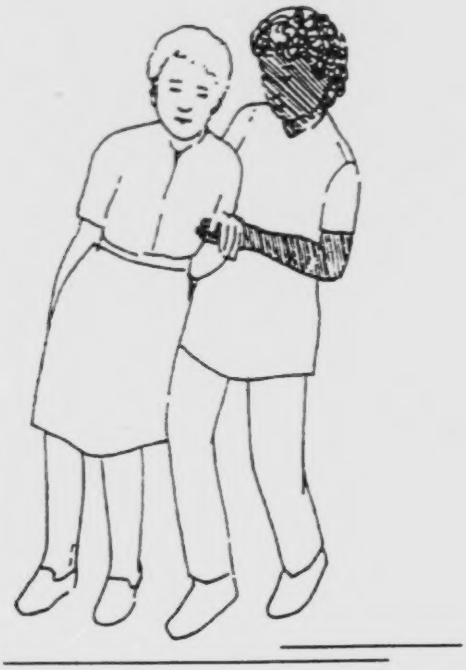


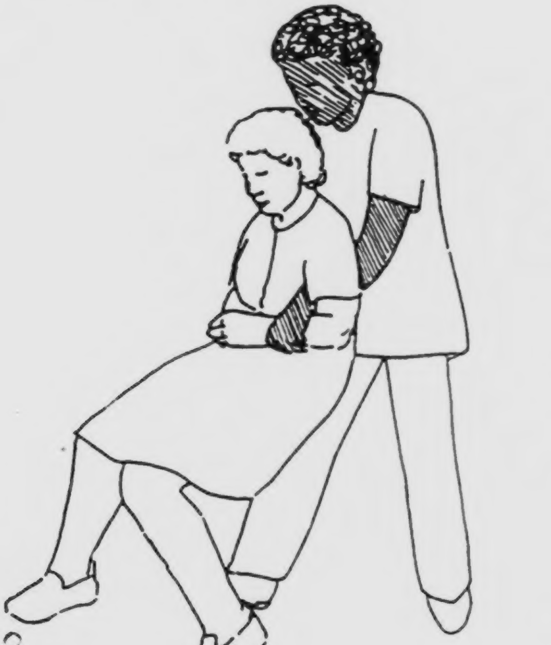
4. Drag from room, hands under shoulders at arms. If conditions permit, roll client onto blanket, then drag from room.

HO 2

SAFELY HANDLING A FALLING CLIENT

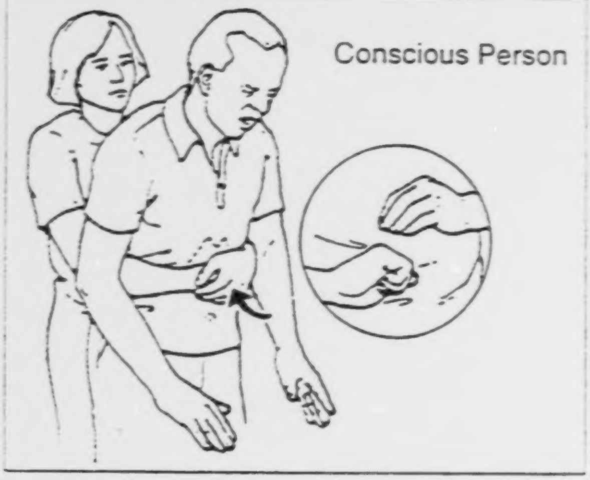
When handling a falling client, pull him/her close to your body and gently ease him/her to the floor.



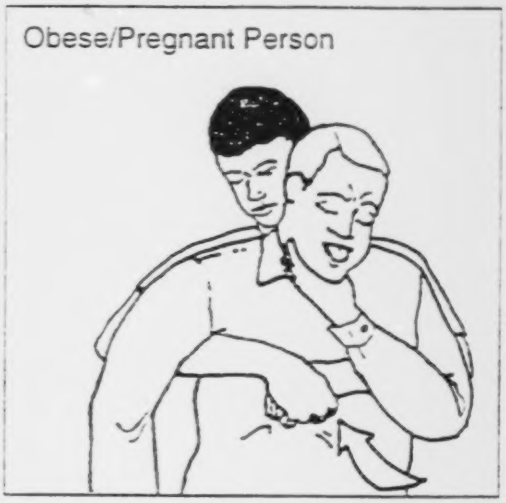


FIRST AID FOR THE CHOKING VICTIM (ADULT)

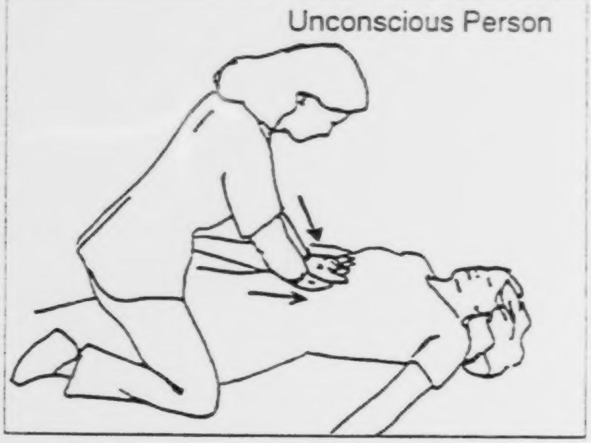
ABDOMINAL THRUSTS



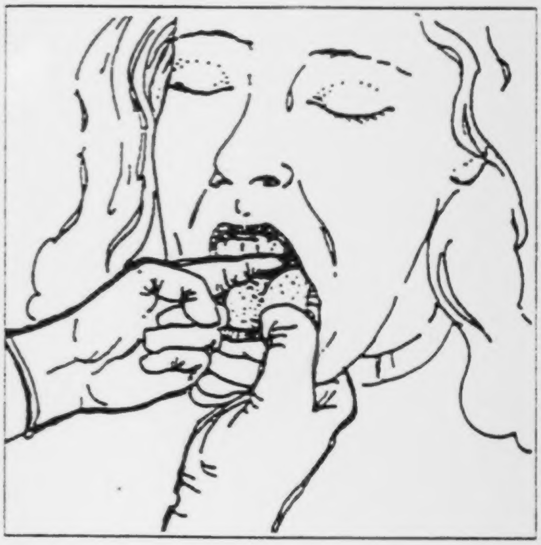
Conscious Person



Obese/Pregnant Person



Unconscious Person



MOUTH SWEEP

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

SCOPE OF UNIT:

This unit covers all areas of safety. It refers to specific measures to be aware of regarding clients, the environment, particular safety devices, as well as the role of the health care assistant in fire and disaster safety and using body mechanics to position the client.

INFORMATION TOPIC: III-3 AND DEMONSTRATION: III-3

BODY MECHANICS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

Information

1. Define body mechanics.
2. Identify five reasons body mechanics are important.
3. Identify key points of body mechanics.
4. Describe the seven body positions for clients.
5. Identify principles of lifting and moving a client.

Demonstration

6. Position client in the seven body positions.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Key Points in Body Mechanics
2. HO 2: Body Positions
3. HO 3: Bed Positioning for the Hemiplegic Client
4. Bed with side rails
5. Two pillows - additional blankets/towels as needed
6. Handroll/washcloth

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 3 prior to class and be prepared to discuss the information presented and return the demonstration on positioning clients.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapters 27 & 28.

Hegner, Barbara; Ester Caldwell. *Nursing Assistant, A Nursing Process Approach*. 6th ed. Albany, NY: Delmar Publishers, 1992. Unit 12, Section 5.

Schniedman, Rose; Susan Lambert; Barbara, Wander. *Being a Nurse Assistant*. 5th ed. The Hospital Research and Educational Trust, 1989.

Sorrentino, Sheila. *Mosby's Textbook for Nursing Assistant*, 3rd ed. St. Louis, MO: Mosby Year Book Inc., 1992. Chapter 10.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 2, Section 1 and Chapter 7.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 8.

INTRODUCTION:

As a health care assistant, one of your duties will be to move clients. You must know how to do this without straining your back and causing an injury to yourself or the client. There are ways to use your body to reduce strain and fatigue and that is what this lesson will cover. Remember, your feet are your base of support. Your strongest and largest muscles are in the shoulders, upper arms, hips, and thighs. These are the muscles which we use to lift and move heavy objects.

Correct positioning of the incapacitated client is very important. Proper positioning can prevent complications of decubitus ulcers (bedsores) or contractures of a muscle. This lesson will include ways to position the client.

Clients will often need help when moving in the bed. You must assess your client properly to determine if you can move him/her by yourself or if you will need help. If the procedure requires two persons due to the client being "dead weight," very heavy, or one with very fragile skin, use a pull/lift sheet. This will prevent friction and irritation to the skin. Keep in mind the principles of body mechanics anytime you are moving the client.

Proper positioning of the client in the bed is necessary to maintain normal body function, to prevent contractures, to assure comfort, and to prevent pressure on one area of the body. Body alignment is the proper relationship of body parts to each other to avoid unnecessary strain/injury. Always look at the client when positioning him/her to see if the body is straight and looks comfortable; check to make sure no bony areas are pressing/rubbing on the mattress. Pillows are used to position the client. If you do not have enough pillows, a rolled bath blanket may be used.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT

UNIT III : SAFETY

OUTLINE:

I. Body Mechanics - using correct movement of the body in performing certain functions in a manner that does not add undue strain. **(II-1)**

II. Importance of Body Mechanics **(II-2)**

- A. Protects you from injury by aligning body segments to each other; by standing straight, the main parts of your body (head, chest, and pelvis) are properly aligned one over the other to maintain good balance
- B. Reduces fatigue to prevent strain on the spine
- C. Makes the spine work with you and for you to maximize body strength
- D. Makes lifting, transferring, and moving objects easier to minimize fatigue
- E. Provides balance and stability
- F. Using proper body mechanics is the safest thing you can do to prevent injury to yourself and the client.

III. Key Points of Body Mechanics (HO 1)

- A. When moving a client, be sure he/she knows when he/she is going to be lifted, how you plan to do it, and where you are going to lift him/her to. Use verbal cues.
- B. Determine what has to be done and if you will need help. Never attempt to lift alone if you feel that you will not be able to do so safely.
- C. Place feet apart (about 12-14 inches) with one slightly ahead of the other. Feet should be shoulder-width apart to give you a broad base of support (i.e., area on which your weight is resting). Keep your weight evenly balanced on both feet. **(II-3)**
- D. Get close to whatever is being lifted, instead of reaching for it. Move in and hold the object close to your body.
- E. Keep your back straight; bend at the hip and knees. **(II-4)**
- F. To lift, squat or bend knees, then straighten your legs. Using your thigh or leg muscles, lift the object with your upper arms.

G. Lift smoothly to avoid strain produced by jerky movements. Use verbal cues to signal your coworker when it is time to lift; i.e., count, "one, two, three, LIFT!" **(II-5)**

H. When changing the direction of your body, pivot with your feet--never twist your body.

I. Push, pull, slide, and roll whenever possible, rather than lift.

J. Remind coworkers to use good body mechanics.

K. Use your arms to support an object. The muscles of your legs actually do the job of lifting, not the muscles of your back.

L. Always look for any obstacles or hazards before moving a client.

M. When an action requires physical effort, try to use as many muscles as possible. For example, use both hands rather than one hand to pick up a heavy piece of equipment.

N. When you lift an object or need to pick something up off the floor, squatting down rather than bending over will reduce strain on the spine. **(II-6)**

O. Ambulatory clients should observe the same body mechanics as a health care assistant.

P. Incapacitated clients who cannot change their positions

   1. Get help as needed.

   2. Use turning and lifting sheets.

   3. Use mechanical devices.

   4. Change their positions at least every two hours.

Q. Support natural body curves in their normal positions.

   1. Client feels more comfortable.

   2. It relieves strain on the body.

   3. Proper body position assists the body in functioning properly.

   4. Proper positioning prevents contractures and pressure areas.

IV. Seven (7) positions for the Incapacitated Client (HOs 2 & 3)

   A. Supine - also called back lying, dorsal recumbent, or horizontal recumbent

   B. Right lateral recumbent position - on the right side with the spine straight

C. Prone position - on the abdomen with the spine straight

D. Left lateral recumbent position - on the left side with the spine straight

E. On the back with the head of the bed elevated

  1. Semi Fowler's - head of bed elevated 30°
  2. Fowler's - head of the bed elevated 45° to 60°
  3. High Fowler's - the head of bed elevated 90°

F. Sims' position - on the left side, with the left leg extended and the right leg flexed

G. Sitting position - sitting with head and spine erect

V. Principles to Remember when Lifting and Moving a Client

A. The health care assistant's movements should be slow and steady.

B. Explain to the client what you are going to do so that he/she will have confidence in you.

C. Allowing a client to stay in a fetal position (curled-up position) can lead to decubitus, pneumonia, contractures, bloods clots, and kidney and bladder stones.

D. Change the client's position at a minimum of every 2 hours.

E. Always lift the client, NEVER slide him/her. A lift sheet can be used to help lift the client which helps prevent friction on the skin. **(II-6)**

F. Sliding causes the client's skin to rub against the sheets which can scratch and injure the skin.

G. Handle the client gently. Remember skin is easily bruised and bones are easily broken.

H. Sitting up in bed may cause the client to become dizzy.

I. When moving a client protect all tubing.

J. If the client is able to assist with moving, direct the client what to do and when to do it. For example, the health care assistant instructs the client to bend knees and place feet firmly on bed. On the count of three, the client pushes with his/her feet as the health care assistant moves the client up in the bed. **(II-7)**

K. When working with another health care assistant to move/lift a client, the health care assistants work on opposite sides of the bed. Movements should be synchronized as the client is moved/lifted. **(II-8, 9)**

L. Always wash hands between clients.

VI. Demonstrate Procedures for Positioning Clients

VII. Summary and Conclusion

A. Body mechanics

B. Importance of body mechanics

C. Key points of body mechanics

D. Seven positions for the incapacitated client

E. Principles to remember when lifting and moving a client

F. Review procedures for positioning clients

The importance of understanding and using proper body mechanics cannot be overemphasized. Serious injury to either or both the health care assistant and client can occur as a result of improper lifting or moving techniques. The next unit is on concepts of microbiology.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

STEPS OF PROCEDURE FOR POSITIONING CLIENT IN SEVEN BODY POSITIONS.

(II-10 - 12)

Wash hands; provide privacy for all positions.

Tell client what you are going to do.

Prone position

1. Position client on abdomen.
2. Straighten spine.
3. Straighten legs.
4. Flex arms and bring up on either side of the head.
5. Place a small pillow under the abdomen.
6. Place a small pillow under the lower legs and ankles.
7. An alternate method may be used by moving the client to the foot of the bed and extending the feet over the edge of the mattress.

Left lateral recumbent position

1. Position client on left side.
2. Place pillow under head.
3. Flex right leg.
4. Support right leg with a pillow.
5. Place a pillow in front of client to extend under the flexed right arm and shoulder.
6. Flex the left arm and bring it up under the head pillow.

Fowler's position

1. Position client on back.
2. Elevate head of bed.

    a. Semi-Fowler's 30°

    b. Fowler's 45°-90°

    c. High Fowler's 90°

3. Place a pillow under each arm.

4. May use padded footboard to prevent foot drop.

Sims' position

1. Position client on left side.

2. Extend left leg.

3. Flex right leg.

4. Extend left arm and place it behind the back.

5. Place a small pillow under head.

Sitting position

1. Place client in chair so that the head and spine are erect.

2. Position back and buttocks against the back of the chair.

3. Place a small pillow at the small of the back.

4. Position the legs so that the back of the knees are forward so as to not touch the chair.

Supine position

1. Place bed in flat (horizontal) position.

2. Position client on the back.

3. Place a pillow under client's head.

4. Extend arms and support with small pillows.

5. Support small of back with a rolled towel.

6. Place a small pillow or rolled towel along the thigh and tucked under to prevent the hip from rotating outward.

7. May use a padded foot board to prevent foot drop.

Right lateral recumbent position

1. Turn client on right side with spine straight.
2. Flex right arm and position under the pillow.
3. Bring left arm straight over the hip.
4. Flex left leg slightly and support it on a pillow.

Wash hands.

Position call light.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

INTERACTION ITEMS:

1. How do you define body mechanics?
2. What are five reasons why body mechanics are important?
3. How should your feet be placed in order to provide a broad base of support?
4. What is the position of the back, hips, and knees when lifting an object?
5. How can you signal your coworkers that you are ready to move a client?
6. How do you lift or pick something up off the floor?
7. What are the seven positions for positioning a client?
8. How do you instruct clients who are able to assist when lifting and moving them up in bed?
9. Where does the second person stand when two persons are lifting a helpless client?
10. What can be the result of failing to synchronize with verbal cues when two persons are working together in a lifting procedure?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Show audiovisual.
2. Have each student lift box off floor using proper body mechanics.
3. Show anatomy diagram of muscle groups used when lifting.
4. Have a class discussion on good posture.
5. Have the class see how long they can balance on one foot.
6. Have students position each other in the seven positions for positioning a client.

ANSWERS TO EVALUATION ITEMS:

1. Using correct movements of the body in performing certain functions in a manner that does not add undue strain.

2. b
3. d
4. b
5. a
6. b
7. d
8. c
9. e
10. a
11. g
12. d
13. b
14. d

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III : SAFETY

EVALUATION ITEMS:

1. Define body mechanics.

2. Using good body mechanics does all of the following except: (Circle the letter of the best answer.)

   a. Prevents injury to the client.
   b. Increases the client's strength.
   c. Prevents injury to the health care assistant.
   d. Makes lifting and moving object easier.

3. Proper body mechanics includes: (Circle the letter of the best answer.)

   a. Straightening the knees and hips while moving an object.
   b. Placing feet together, side by side.
   c. Lifting objects using the muscles of your back.
   d. Placing feet shoulder width apart to give broad base of support.

4. The largest and strongest muscles are located in the: (Circle the letter of the best answer.)

   a. Neck and chest.
   b. Hips and thighs.
   c. Back and neck.
   d. Feet and legs.

5. When carrying a heavy object, you should carry it: (Circle the letter of the best answer.)

   a. Close to your body.
   b. At arms length.
   c. Just above your head.
   d. Below the waist line.

6. To lift a heavy object from the floor, you should: (Circle the letter of the best answer.)

   a. Bend from the waist.
   b. Squat on the floor.
   c. Kneel on the floor.
   d. Keep your knees straight.

7. The correct way to change the direction of your body is: (Circle the letter of the best answer.)

   a. Turn backwards.
   b. Turn your body in segments.
   c. Turn from the waist.
   d. Turn your entire body.

Match the position in Column I with the correct description of the position in Column II.

	Column I		Column II
____ 8.	Sims'	a.	On the back
____ 9.	Sitting	b.	On the left side with the spine straight
____ 10.	Supine	c.	On the left side with the left leg extended and the right leg flexed
____ 11.	Prone	d.	On the back with head of bed elevated
____ 12.	Fowler's	e.	Sitting with head and spine erect
____ 13.	Left lateral recumbent	f.	On the right side with the spine straight
		g.	On the abdomen with spine straight

14. When lifting and moving the client, the health care assistant should: (Circle the letter of the best answer.)

   a. Always slide the client from one side of the bed to the other side.
   b. Move fast.
   c. Allow the client to remain in the fetal position.
   d. Change the client position at a minimum of every two hours.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT III: SAFETY

EVALUATION ITEMS:

NAME OF STUDENT: _______________

POSITION CLIENT IN SEVEN BODY POSITIONS

EQUIPMENT:

1. Pillows

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
Wash hands; provide privacy for all positions.		
Tell client what you are going to do.		
Prone position 1. Position client on abdomen.		
2. Straighten spine.		
3. Straighten legs.		
4. Flex arms and bring up on either side of the head.		
5. Place a small pillow under the abdomen.		
6. Place a small pillow under the lower legs and ankles.		
7. An alternate method may be used by moving the client to the foot of the bed and extending the feet over the edge of the mattress.		
Left lateral recumbent position 1. Position client on left side.		
2. Place pillow under head.		
3. Flex right leg.		
4. Support right leg with a pillow.		
5. Place a pillow in front of client to extend under the flexed right arm and shoulder.		
6. Flex the left arm and bring it up under the head pillow.		
Fowler's position 1. Position client on back.		
2. Elevate head of bed. a. Semi-Fowler's 30°		
b. Fowler's 45°-90°		
c. High Fowler's 90°		
3. Place a pillow under each arm.		

4. May use padded footboard to prevent foot drop.		
Sims' position 1. Position client on left side.		
2. Extend left leg.		
3. Flex right leg.		
4. Extend left arm and place it behind the back.		
5. Place a small pillow under head.		
Sitting position 1. Place client in chair so that the head and spine are erect.		
2. Position back and buttocks against the back of the chair.		
3. Place a small pillow at the small of the back.		
4. Position the legs so that the back of the knees are forward so as to not touch the chair.		
Supine position 1. Place bed in flat (horizontal) position.		
2. Position client on the back.		
3. Place a pillow under client's head.		
4. Extend arms and support with small pillows.		
5. Support small of back with a rolled towel.		
6. Place a small pillow or rolled towel along the thigh and tucked under to prevent the hip from rotating outward.		
7. May use a padded foot board to prevent foot drop.		
Right lateral recumbent position 1. Turn client on right side with spine straight.		
2. Flex right arm and position under the pillow.		
3. Bring left arm straight over the hip.		
4. Flex left leg slightly and support it on a pillow.		
Wash hands.		
Position call light.		

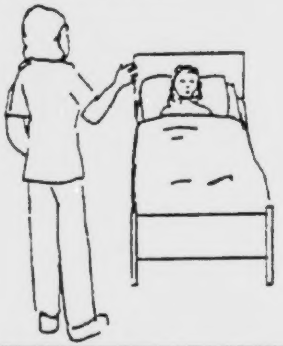
The student has satisfactorily completed the procedure "POSITION CLIENT IN SEVEN BODY POSITIONS" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

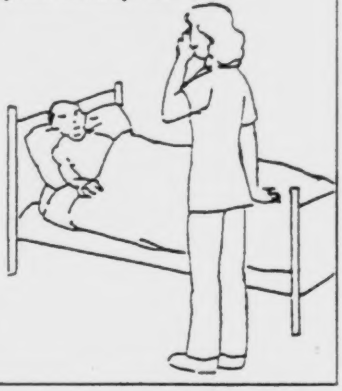
Date

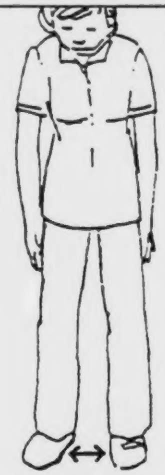
KEY POINTS IN BODY MECHANICS

1. When you are lifting a client, be sure that the client knows you are lifting, how you plan to lift, and where you are going to lift him/her to.

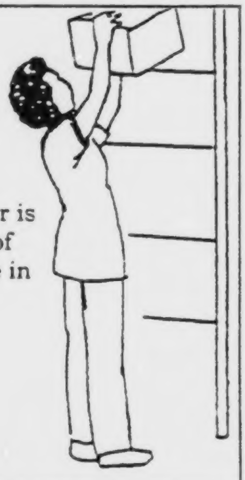


2. Size up the load to be lifted. Do not attempt to lift alone if you have any doubt about your ability to do so.

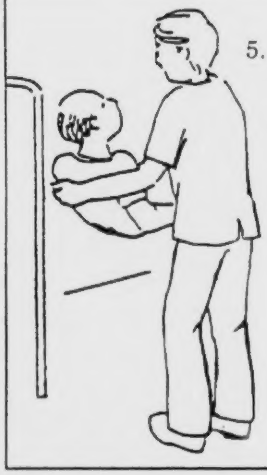




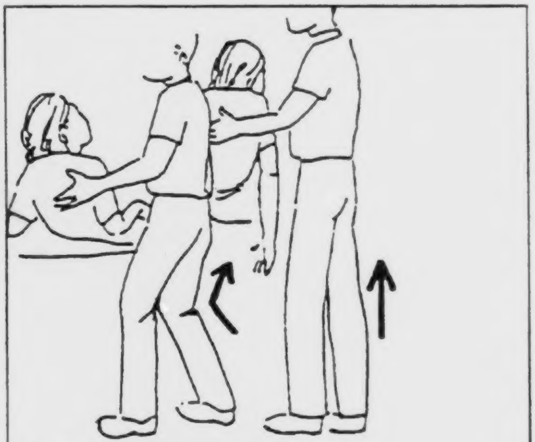
3. Check your footing. Your feet should be shoulder width apart to give you a broad base of support (good balance).



4. Get close to whatever is being lifted instead of reaching for it. Move in and hold it close.



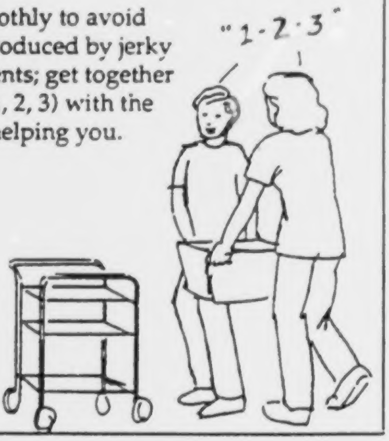
5. Get yourself "lined up," i.e., keep your back straight (put on "high midriff") bend at the knees and hips.



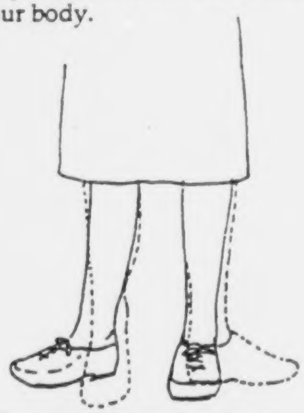
6. Straighten your legs to lift.

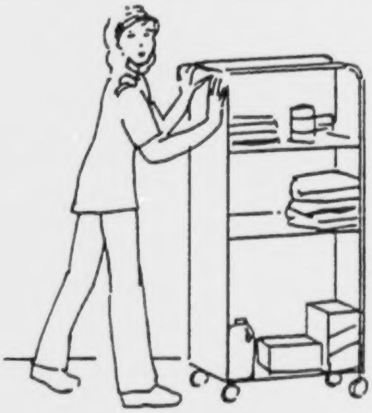
BEST COPY AVAILABLE

7. Lift smoothly to avoid strain produced by jerky movements; get together (ready, 1, 2, 3) with the person helping you.



8. Shift the position of your feet to turn; never twist your body.

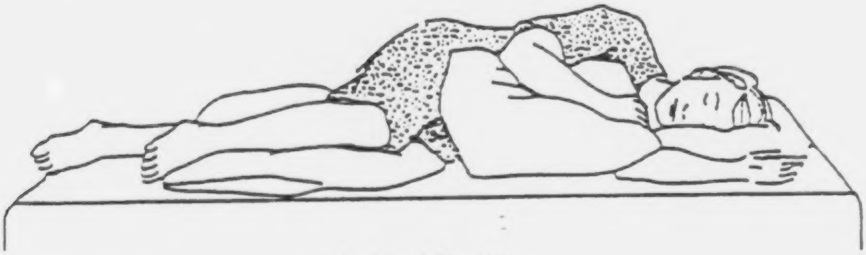




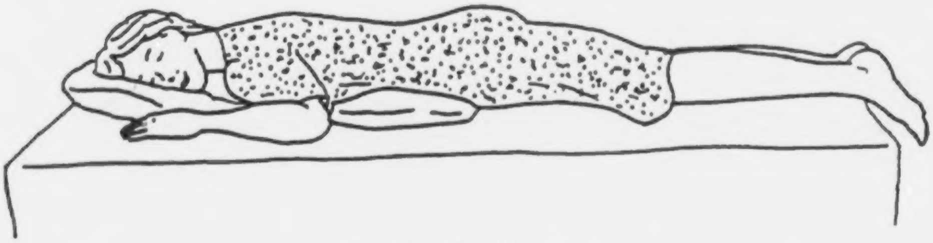
9. Push or pull an object (instead of lifting) whenever you can; and use these same rules. It is safer and easier that way.

10. Remind co-workers to use good body mechanics.

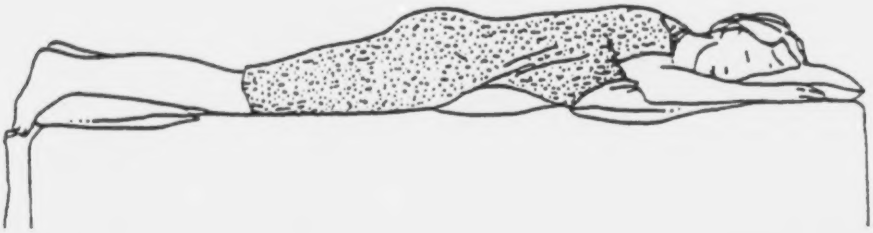
BODY POSITIONS

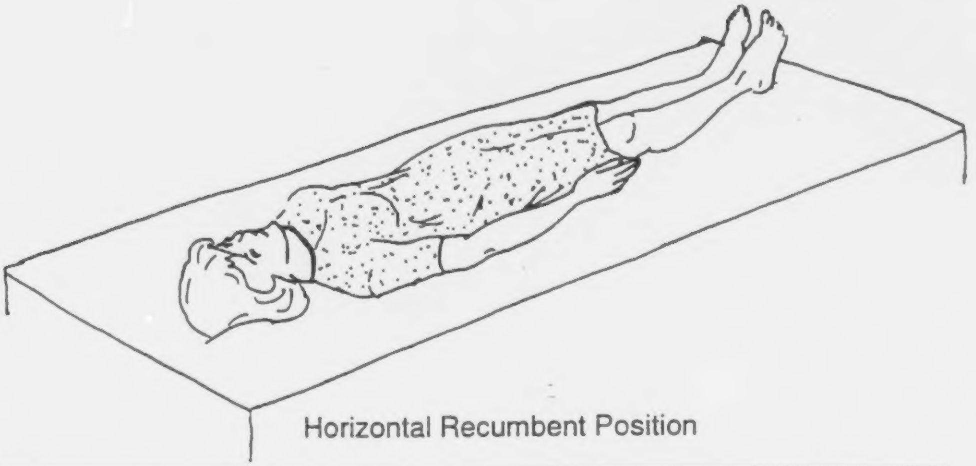


Lateral Position

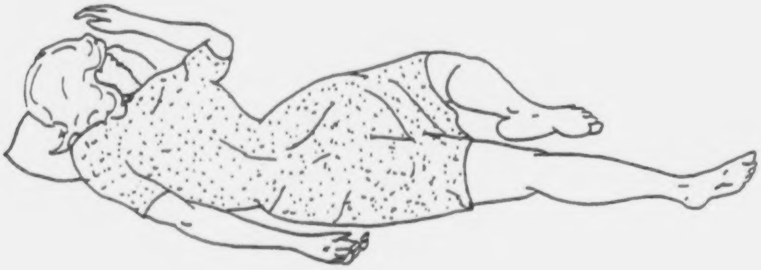


Prone Positions

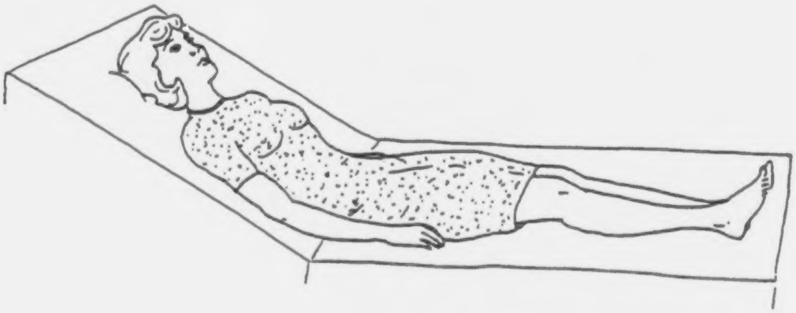




Horizontal Recumbent Position

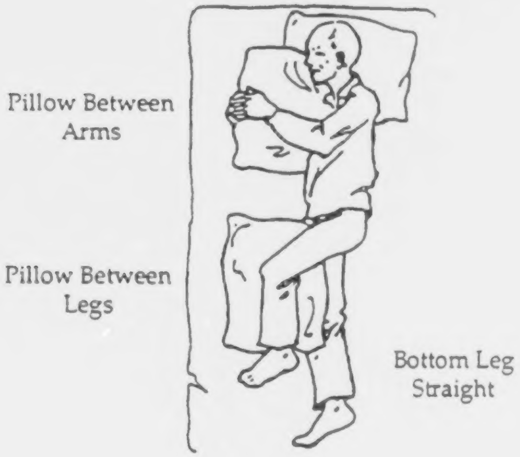


Left Sims' Position

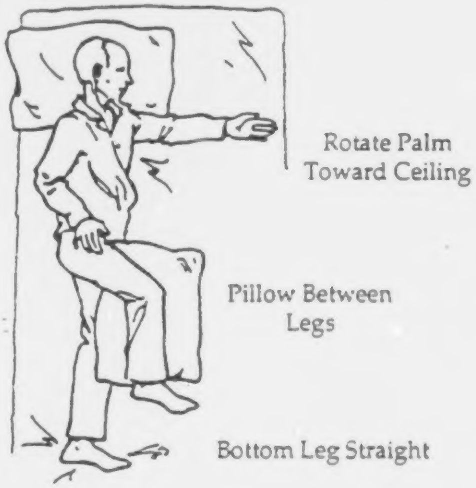


Semi Fowler's Position

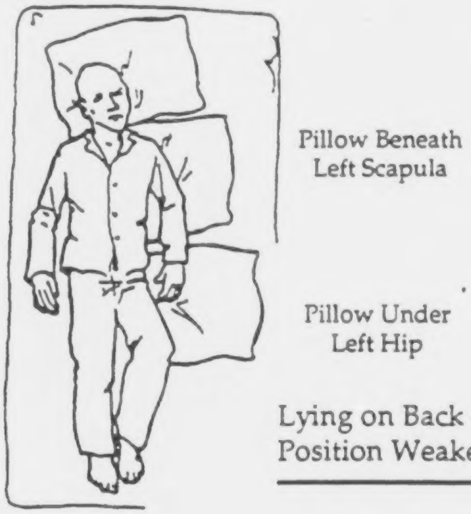
BED POSITIONING FOR THE HEMIPLEGIC CLIENT


Pillow Between Arms
Pillow Between Legs
Bottom Leg Straight

Side-Lying on Unaffected Side


Rotate Palm Toward Ceiling
Pillow Between Legs
Bottom Leg Straight

Side-Lying on Affected Side


Pillow Beneath Left Scapula
Pillow Under Left Hip

Lying on Back -
Position Weaker Side of Body

Points to Remember

- Position away from spastic patterns
- Encourage symmetrical postures
- Do not use footboards
- Promote weight-bearing on affected side
- Reposition as necessary

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

SCOPE OF UNIT:

This unit covers an introduction to microorganisms, transmission of microorganisms, infection control, AIDS, and hepatitis. It includes procedures for hand washing and donning and removing gloves, gowns, and masks.

INFORMATION TOPIC: IV-1 OR DEMONSTRATION:

MICROORGANISMS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Identify terms pertaining to microorganisms by matching with their definitions.
2. Match the two classifications of microorganisms with examples from each classification.
3. Match the types of pathogenic microorganisms with the major groups.
4. Identify requirements for the growth of microorganisms.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Infectious Communicable Diseases
2. HO 2: Types of Bacteria
3. Carolina Biologicals, prepared slides of microorganisms

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 1 prior to class and be prepared to discuss the information presented.

REFERENCES:

Hegner, Barbara; Ester Caldwell. *Nursing Assistant, A Nursing Process Approach.* 6th ed. Albany, NY: Delmar Publishers, 1992.

Infection Control Protocol for Student Clinical Experiences: A Protocol Document for Health Occupations Programs in Missouri. Columbia, MO: Instructional Materials Laboratory, 1994.

Kast, Barbara. *Competency Exam Prep and Review for Nursing Assistants*. 1st ed. Albany, NY: Delmar Publishers, 1990.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

INTRODUCTION:

Some microorganisms that cause fermentation in food are helpful to people. In addition, there are microorganisms in our digestive tracts that turn food into waste. Harmful microorganisms, which cause disease, are called pathogens. Pathogens give off a substance called toxins which poison the body. Pathogens also destroy body tissue because they use it as food. A good microorganism, such as those found in the digestive system, becomes pathogenic if for some reason it moves into another body system. Microorganisms can be destroyed with pasteurization, disinfection, and sterilization.

Why is it important for you to know the different kinds of microorganisms and what makes them grow and reproduce? (1) You can understand why our scientists continue to study living organisms. (2) You will have a knowledge of basic concepts which you can use to further your interest into detailed study of microbiology or related areas. (3) You will understand the necessity of eliminating disease vectors.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

  A. Aerobic organism - a microorganism that requires oxygen in order to live

  B. Anaerobic organism - a microorganism that can exist only in the absence of air

  C. Bacteriology - study of bacteria

  D. Gram positive or gram negative bacteria - denotes color the bacteria take when a special stain is used

  E. Inclusion bodies - colonies of viruses growing in tissues

  F. Metazoa - multicellular animal forms, e.g., roundworms, tapeworms

  G. Microbiology - the scientific study of microorganisms

  H. Parasitic organism - one which uses living organic material as a source of food

  I. Pathogenic organisms - those that produce disease

  J. Protozoa - one-celled animals

  K. Virulence - the disease-producing power of an organism

  L. Virus - smallest of all microorganisms

II. Classifications of Microorganisms **(II-2)**

  A. Scientific classification **(II-3)**

    1. Plant

    2. Animal

    3. Protista

  B. Practical classification - requirements for growth **(II-4)**

    1. Parasitic - requires host

    2. Anaerobic - requires little to no oxygen

3. Aerobic - requires oxygen

III. Major Groups of Pathogenic Microorganisms (HO 1) **(II-5)**

A. Bacteria - single-celled microscopic plants (HO 2)

1. Staphylococcus

2. Streptococcus (rheumatic fever and strep throat are examples.)

3. Bacillus (Mycobacterium tuberculosis is one example.)

B. Fungi

1. Molds - diseases, infections

a. Histoplasmosis

b. Ringworm

c. Athlete's foot

2. Yeasts

a. Yeast vaginitis

b. Thrush

C. Protozoa - one-celled microscopic animals

1. Life cycle - some require two hosts for life cycle

2. Protozoal diseases

a. Malaria

b. African sleeping sickness (African trypanosomiasis)

c. Amebic dysentery

d. Trichomoniasis (vaginal infection)

D. Metazoa - multicellular animal forms

1. Life cycle - many require two hosts

2. Metazoan diseases

a. Pin worms

b. Hookworm

        c. Trichinosis

        d. Tape worms

E. Viruses - A virus can only survive in living cells.

    1. Size - may not be seen with microscope

    2. Types - many different types; affect different parts of body

    3. Examples of viral infections

        a. Hepatitis B virus (HBV) - hepatitis B

        b. Herpes virus - herpes simplex, herpes zoster

        c. Human immunodeficiency virus (HIV) - acquired immunodeficiency syndrome (AIDS)

        d. Influenza virus - influenza

        e. Rubella - measles

F. Rickettsiae - classified as protista

    1. Transmission - usually by mosquitoes, body lice, wood ticks, and mites

    2. Rickettsial diseases

        a. Rocky Mountain spotted fever

        b. Lyme disease

        c. Typhus fever

IV. Growth of Microorganisms - Bacteria and viruses are the most common in the spread of disease. **(II-6)**

A. Grow best

    1. At body temperature

    2. Where light is limited

    3. Where there is moisture

    4. Where there is a simple food supply

B. Found everywhere

    1. Everything we use in daily living - food, water, objects we touch

2. An object used by others

V. Summary and Conclusion

A. Terms and definitions

B. Classifications of microorganisms

C. Major groups of pathogenic microorganisms

D. Growth of microorganisms

As a health care assistant you need to realize that there are different types of organisms. The next lesson will be on the transmission of microorganisms. You will learn how microorganisms are transmitted so that you can apply the infection control techniques discussed in Lesson 3 of this unit.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV: CONCEPTS OF MICROBIOLOGY

INTERACTION ITEMS:

1. What is the definition of microbiology, pathogenic organism, parasitic organism, anaerobic organism, bacteriology, metazoa, protozoa, gram positive or gram negative bacteria, inclusion bodies, virulence, virus, and aerobic organism?
2. How are the scientific and practical classifications of microorganisms different?
3. What are three examples of scientific classification of microorganisms?
4. What are three examples of practical classification of microorganisms?
5. What are the six major groups of pathogenic microorganisms?
6. Where do microorganisms grow best?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Invite a microbiologist as a guest speaker.
2. Observe prepared slides of some major microorganisms under a microscope.

ANSWERS TO EVALUATION ITEMS:

1. c
2. e
3. f
4. a
5. b
6. d
7. d
8. f
9. a
10. e
11. b
12. c
13. d
14. b
15. d
16. b
17. c
18. a
19. a

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

	Column I		Column II
____ 1.	Virulence	a.	The scientific study of microorganisms
____ 2.	Aerobic organism	b.	Study of bacteria
____ 3.	Virus	c.	The disease-producing power of an organism
____ 4.	Microbiology	d.	A microorganism that can exit only in the absence of air
____ 5.	Bacteriology	e.	A microorganism that requires oxygen in order to live
____ 6.	Anaerobic organism	f.	Smallest of all microorganisms

Match the term in Column I with the correct definition in Column II.

	Column I		Column II
____ 7.	Inclusion bodies	a.	One-celled animals
____ 8.	Metazoa	b.	One which uses living organism material as a source of food
____ 9.	Protozoa	c.	Denotes the color the bacteria takes when a special stain is used
____ 10.	Pathogenic organism	d.	Colonies of viruses growing in tissues
____ 11.	Parasitic organism	e.	One which produces disease
____ 12.	Gram positive or Gram negative bacteria	f.	Multicellular animal forms (e.g. roundworms, tapeworms)

13. An example of a microorganism in the practical classification is: (Circle the letter of the best answer.)

    a. Animal
    b. Protista
    c. Plant
    d. Parasitic

14. An example of a microorganism in the scientific classification is: (Circle the letter of the best answer.)

    a. Pathogenic
    b. Plant
    c. Parasitic
    d. Anaerobic

Match the microorganisms in Column I with the major group of microorganisms in Column II.

Column I	Column II
____ 15. Rubella	a. Bacteria
____ 16. Yeasts	b. Fungi
____ 17. Protista	c. Rickettsial
____ 18. Streptococcus	d. Virus

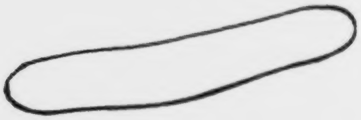
19. What are two of the requirements for the growth of microorganisms? (Circle the letter of the best answer.)

    a. At body temperature and where there is food
    b. At body temperature and where light is bright
    c. Where there is food and where there is no moisture
    d. Where light is bright and there is no moisture

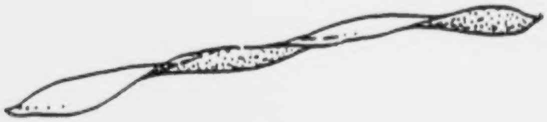
INFECTIOUS COMMUNICABLE DISEASES

	Name	Incubation	Transmitted
1.	AIDS	6 months to 16 years. Average is 4 years.	Virus - direct contact with body secretions of an infected person and blood
2.	Chicken pox	14-21 days	Virus - respiratory; droplet - coughing, sneezing
3.	Type A Hepatitis	2-6 weeks	Virus - feces, oral secretions, intravenous injections, blood
4.	Type B Hepatitis	6 weeks to 6 months	Virus - feces, oral, parenteral injections, blood
5.	Impetigo	1-5 days	Bacteria - direct contact (staph or strep)
6.	Influenza	1-3 days	Virus - droplets, coughing, sneezing, talking, touching a contaminated article
7.	Measles (Rubeola)	9-14 days	Virus - droplet and direct contact
8.	Measles, German Rubella	14-21 days	Virus - droplet and direct contact
9.	Mononucleosis	4-7 weeks	Virus - nose and throat secretions
10.	Mumps	8-30 days	Virus - droplet
11.	Whooping cough pertussis	7-20 days	Bacillus hemophilus - direct contact, droplet
12.	Poliomyelitis	4-14 days	Nose and throat secretions, feces
13.	Scabies	1-2 days	Mites - direct contact, skin
14.	Tuberculosis	varies	Bacteria - droplet, sputum
15.	Lice	7 days	Louse - direct contact

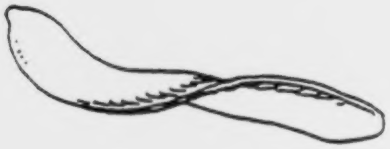
TYPES OF BACTERIA



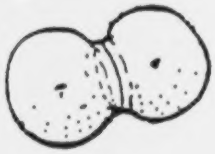
Bacillus



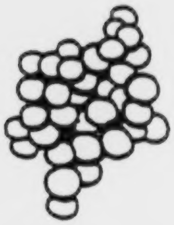
Spirochete



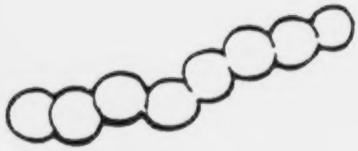
Spirillum



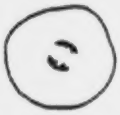
Diplococcus



Staphylococcus



Streptococcus



Coccus

Concepts of Microbiology, page 4.13

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

SCOPE OF UNIT:

This unit covers an introduction to microorganisms, the prevention and control of infection, isolation, AIDS, and hepatitis. It includes procedures for hand washing and donning and removing gloves, gowns, and masks.

INFORMATION TOPIC: IV-2 OR DEMONSTRATION:

TRANSMISSION OF MICROORGANISMS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms presented in this lesson to correct definitions.
2. Identify portals of entry for microorganisms.
3. Identify portals of exit for microorganisms.
4. Determine who is considered a susceptible host.
5. Identify methods of transmission of microorganisms.
6. Compare and contrast symptoms of a localized bacterial infection to a systemic bacterial infection.
7. Identify symptoms of infection.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Geri Germ
2. HO 2: Ways Organisms Are Spread

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 2 prior to class and be prepared to discuss the information presented.

REFERENCES:

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 14.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 15.

Hegner, Barbara; Ester Caldwell. *Nursing Assistant, A Nursing Process Approach*. 6th ed. Albany, NY: Delmar Publishers, 1992. Unit 9.

Infection Control Protocol for Student Clinical Experiences: A Protocol Document for Health Occupations Programs in Missouri. Columbia, MO: Instructional Materials Laboratory, 1994.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 2.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 7.

INTRODUCTION:

Everyone, especially the health care provider, is a key in the prevention of infection. A very large number of germs are present in health care facilities due to many people in the facility. People carry germs wherever they go. Germs may be spread from one client to another. In the long-term care facility, germs can also be spread in the dining room or day room. Visitors and health care providers can be the source of infectious organisms.

Health care assistants must understand how infectious diseases are transmitted so that they can prevent the spread of diseases.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

  A. Carrier - a person who is not infected but transports harmful pathogens

  B. Communicable disease - a disease which can be naturally transmitted from one individual to another by direct or indirect contact

  C. Epidemiology - study of relationship of factors determining frequency and distribution of disease

  D. Fomites - inanimate objects (e.g., bed linens) contaminated by infected persons

  E. Germ - microorganism

  F. Host - person, animal, or plant which supports a parasite

  G. Incubation period - period between the entrance of the organisms to the body and beginning of symptoms

  H. Infection - invasion of the body by pathogenic microorganisms that multiply, causing disease or damage to tissue

  I. Microorganism - a very small living thing (a germ) which can only be seen with a microscope

  J. Portal of entry - pathway by which microorganisms enter the body

  K. Portal of exit - route by which microorganisms leave the body

  L. Resistance - ability to fight off

  M. Transmitted - transferred or spread

  N. Vector - one who carries, especially the animal or insect (e.g., tick, mosquitoes) that transfers infectious microorganisms from one host to another

II. Portal of Entry - Organisms gain entry into the body by a variety of ways (HOs 1 & 2) **(II-2)**

  A. Break in the skin or mucous membranes (staphylococci)

  B. Respiratory tract (common cold)

- C. Genitourinary tract (syphilis, AIDS)
- D. Gastrointestinal tract (salmonellosis, hepatitis)
- E. Circulatory system (meningitis, malaria)

III. Portal of Exit - Organisms Leave the Body **(II-3)**

- A. Excretions from respiratory tract:
  - 1. Coughed
  - 2. Sneezed
- B. Excretions from genital tract
  - 1. Semen
  - 2. Vaginal secretions
- C. Drainage of wounds:
  - 1. Exudate
  - 2. Pus
- D. Urine
- E. Feces
- F. Blood
- G. Saliva
- H. Emesis

IV. The Susceptible Host **(II-4)**

- A. Any person with low resistance or decreased immunity
  - 1. Person who is malnourished or has a debilitating disease
  - 2. Treatments that suppress the body's immune system
- B. Elderly clients
  - 1. Due to aging process, immune system is not as effective at fighting off infection.

329

2. Some diseases and conditions predispose the elderly to infection.
    a. Diabetes mellitus
    b. Congestive heart failure
    c. Dehydration
    d. Malnutrition
    e. Immobility
    f. Diminished pain sensitivity symptoms
    g. Decreased mental ability (unable to describe illness)
    h. Tumors
    i. Drugs
3. Acute phase of infection may be missed in the elderly because of several predisposing factors
    a. Fever may not be present
    b. They may be receiving medications such as aspirin or steroids for other diseases. These medications keep the temperature from rising.
    c. Decreased sensitivity to pain
    d. May be confused
    e. Fluid and nutritional balance is not maintained
    f. Skin loses fat and becomes thin
    g. Gastric acid decreases
    h. Decreased urinary flow and the presence of catheters often leads to urinary tract infection
    i. There may be a decreased cough reflex and less mucus, due to dehydration or medication

C. Hospitalized person

1. An infection that is acquired when a person is in a health care facility is called a nosocomial infection.

2. Infections are frequently due to:

    a. Infected decubiti
    b. Conjunctivitis
    c. Cystitis/pyelonephritis
    d. Pneumonia
    e. Diarrhea
    f. Influenza
    g. Wounds
    h. Surgical site
    i. Indwelling catheter

V. Methods of Transmission of Microorganisms **(II-5)**

A. Vector-borne - Diseases are transmitted by vectors such as mosquitoes and ticks. Malaria, Lyme Disease, and Yellow Fever are examples of diseases transmitted by vectors.

B. Contact

1. Direct contact - direct contact with infected client

    a. Touching the client
    b. Bathing the client
    c. Secretion from the client
    d. Urine from client
    e. Feces from client

2. Indirect contact - items contaminated by one patient coming into contact with the caregiver or another patient

    a. Touching objects
    b. Dishes
    c. Bed linen
    d. Clothing

        - e. Instruments
        - f. Belongings
    - 3. Droplet contact
        - a. Sneezing
        - b. Talking
        - c. Coughing
- C. Airborne - dust particles or moisture in air that is contaminated with an infectious microorganism
- D. Vehicle - contaminated food, blood, drugs, and/or water

VI. Symptoms of Infection **(II-6)**

- A. Local infection
    - 1. Inflammation
        - a. Redness (erythema)
        - b. Swelling (localized)
        - c. Heat (locally)
        - d. Pain
    - 2. Pus
- B. Systemic infection
    - 1. Flu-like symptoms
    - 2. Generalized aching and fatigue
    - 3. Elevated temperature

VII. Summary and Conclusion

- A. Terms and definitions
- B. Portal of entry
- C. Portal of exit
- D. The susceptible host

E. Methods of transmission of microorganisms

F. Symptoms of infection

This lesson explained how microorganisms are transmitted and who is considered a susceptible host. The next lesson presents information on infection control techniques.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

INTERACTION ITEMS:

1. Define infection, microorganism, germ, resistance, transmitted, portal of entry, portal of exit, carrier, host, communicable disease, epidemiology, fomites, incubation period, and vector.
2. How do organisms enter the body?
3. How do organisms leave the body?
4. What is the definition of a susceptible host?
5. What are the five methods of transmission of microorganisms?
6. How are symptoms for a local infection different from symptoms for a systemic infection?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have a group discussion of interaction items.
2. Glo-Germ®, an activity that demonstrates inconsistencies in hand washing, can be used to demonstrate transmission of microorganisms. It can be obtained from BREVIS Co., 3310 South 2700 East, Salt Lake City, UT 84109.

ANSWERS TO EVALUATION ITEMS:

1. f
2. g
3. d
4. b
5. c
6. a
7. e
8. Localized - inflammation (redness, swelling, heat, pain), pus
   Systemic - flu-like symptoms, generalized aching and fatigue, elevated temperature
9. Contact (direct contact, indirect contact, and droplet contact), vehicle contaminated, airborne transmission, and vector-borne
10. d

11. a
12. a
13. c
14. b
15. b

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS:

Match the following terms in Column I to correct definitions in Column II.

Column I	Column II
___ 1. Germ	a. A very small, living thing
___ 2. Resistance	b. Pathway by which microorganisms enter the body
___ 3. Transmitted	c. Route by which microorganisms leave the body
___ 4. Portal of entry	d. Transferred or spread
___ 5. Portal of exit	e. Invasion of the body by pathogenic microorganisms that multiply, causing disease or damage to tissue
___ 6. Microorganism	f. Microorganism
___ 7. Infection	g. Ability to fight off

8. Compare the symptoms of a localized infection to a systemic infection. How are they alike, and how are they different?

____

____

____

9. List four ways microorganisms are transmitted.

a.______________________ c.______________________

b.______________________ d.______________________

Circle the letter that corresponds to the best answer.

10. What is a method of entry for organisms?

   a. Breaks in the skin or mucus membrane
   b. Respiratory tract
   c. Gastrointestinal tract
   d. All of the above

11. Organisms leave the body through all of the following except through ___________.

    a. Excessive perspiration
    b. Drainage of wound
    c. Saliva and blood
    d. Urine and feces

12. Which of the following is not a reason why the elderly client is considered a susceptible host for diseases?

    a. Poor nursing care is administered in all nursing homes.
    b. Infections in the elderly may be missed because of predisposing factors
    c. Some diseases and conditions predispose the elderly to infection
    d. The immune system is not as effective at fighting off infections.

13. Who is considered a susceptible host?

    a. Everyone who is in a long-term care facility or has low resistance
    b. Everyone who is working in a hospital or long-term care facility
    c. Everyone who has low resistance or decreased immunity
    d. Everyone who has low resistance or increased immunity

14. Which of the following may be symptoms of a local infection?

    a. Pain, swelling, whitened area, and increased heat in the area
    b. Pain, swelling, redness, and increased heat in the area
    c. Pain, swelling, redness, and decreased heat in the area
    d. Pain, whitened area, pus, and odor

15. Microorganisms are spread by all of the following except:

    a. Moisture in the air.
    b. Sterile items.
    c. Contaminated food.
    d. Contact of secretions.

HO 1

GERI GERM

As a Nurse Assistant, you need to understand **Epidemiology** (the science of the occurrence of disease) for there is more disease in a health facility than in ordinary households. **Health is desirable - Disease is undesirable.** So, in order to control disease we must know why it exists and how it develops. Then we can strike at its most vulnerable spot. **A Chain of Events creates disease.** If any link is broken, disease will not develop. **A simple thing like Handwashing can break the chain!**

THE SIX LINKS OF THE CHAIN

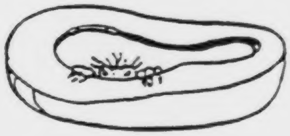
FIRST LINK - Causative Agent: (bacteria, parasite, virus)

Introducing Geri Germ, the awful organism who causes disease.

SECOND LINK - Reservoir for Causative Agent: (sick person or animal)

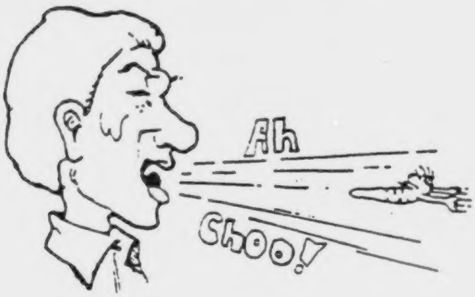
A place where Geri can live.

THIRD LINK - Mode of escape from reservoir: (respiratory tract, intestinal tract, urinary tract, blood stream)

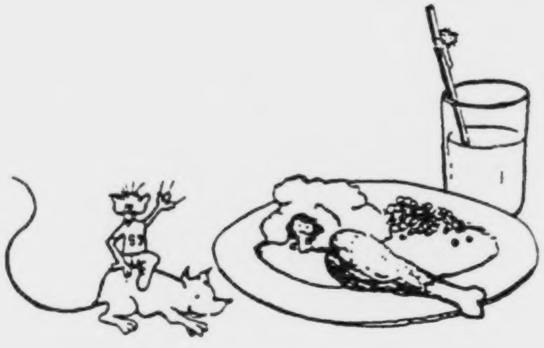


Geri uses all of these as escape routes.

FOURTH LINK - Mode of Transmission from reservoir to new host (person):



Direct: Sneeze, cough, bite, shots, open lesions, physical contact.

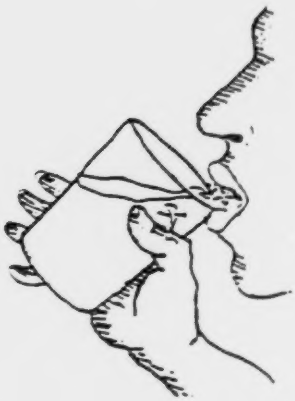


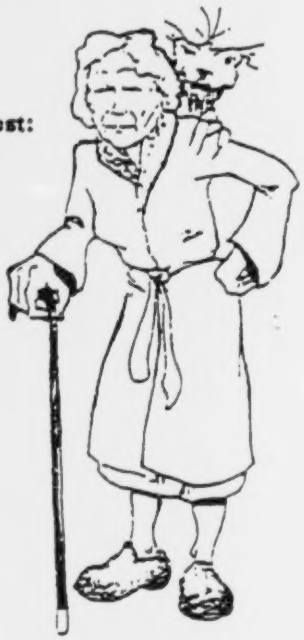
Indirect: Vector (rats, mice, roaches, flies) food, air, or water on articles.

Concepts of Microbiology, page 4.27

FIFTH LINK - Mode of entry into new host (person): (breathing, eating, breaks in skin.)
Study Nursing Procedures.

SIXTH LINK - A susceptible host: (low resistance, no immunity)





'Infection' means an organism is present and multiplying in the body.

'Disease' is the visible interaction between the organism and the infected body.

'Symptoms' are fever, rash, malaise, nausea, and diarrhea.

The Severity of Diseases depends on the strength of the opposing forces.

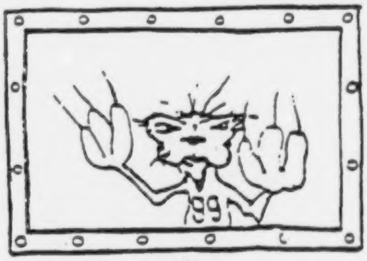
Levels of Severity

Death
Severe
Moderate
Mild
Missed Case
Carrier
No Infection

Expose more people because they are not very sick

Control Measures

Prevent Spread: (Medication to kill organisms.)
By physician's order.

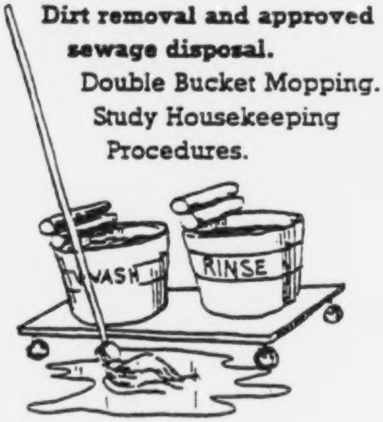


CAUTION!
ISOLATION
CASE

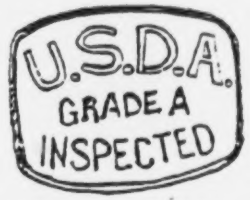
Isolate the sick person:
Study special nursing procedures.
Handwashing must be done.

Control Measure Environmental Sanitation

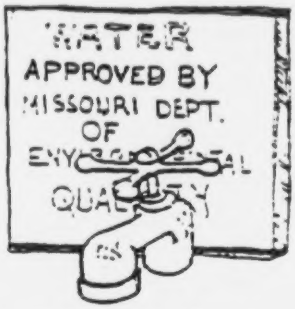
Dirt removal and approved sewage disposal.
Double Bucket Mopping.
Study Housekeeping Procedures.



Clean Air


U.S.D.A.
GRADE A
INSPECTED

Approved Food Source


WATER
APPROVED BY
MISSOURI DEPT.
OF
ENVIRONMENTAL
QUALITY

Pure Water Source

DISINFECTANT
CHEMICAL SOLUTION
STERILIZATION
STEAM UNDER PRESSURE

Insect and Rodent Control

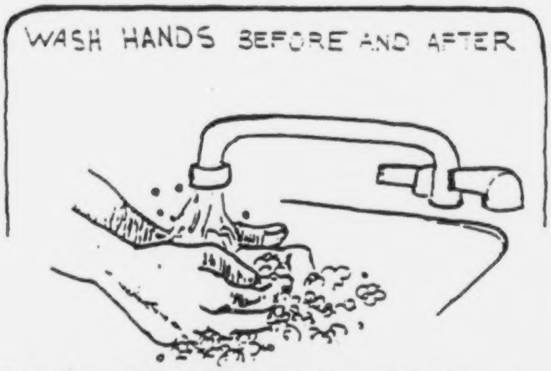
Disinfection
(chemical solution)

Sterilization
(steam under pressure)

Study Nursing Procedures

BUG SPRAY
RAT POISON

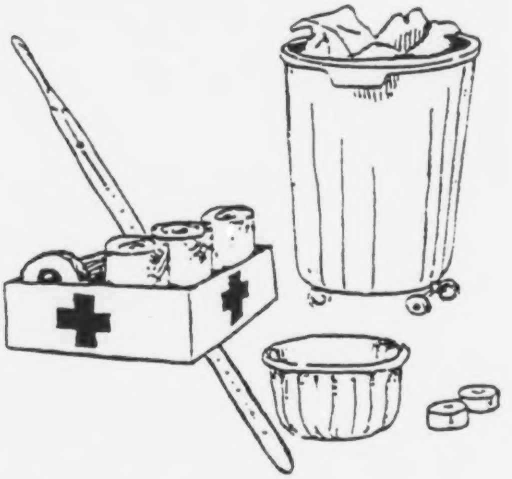
Geri Germ likes: warm places, moist places, dark places, and dirty, cluttered places.


WASH HANDS BEFORE AND AFTER

Handwashing is the most important factor!
Study other Procedures, all departments.

BEST COPY AVAILABLE

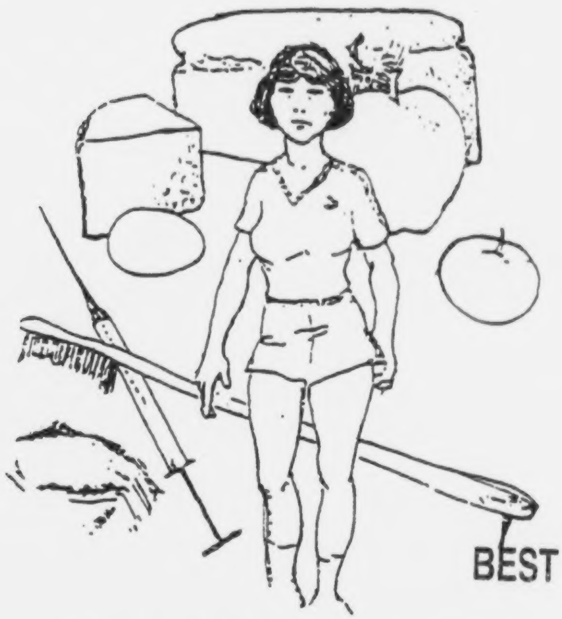
Environmental Sanitation

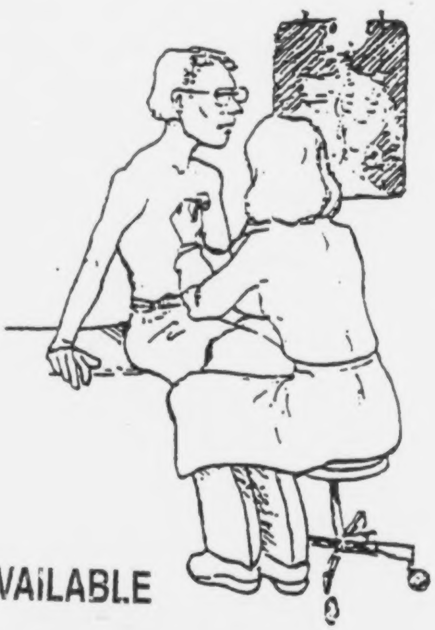


Nursing Procedures

Closed System Irrigation
Proper Linen Handling
Sterile Dressings
Sanitary Medications
Proper Disinfection of Thermometers

CONTROL MEASURES





BEST COPY AVAILABLE

Increase Resistance: keep healthy, immunizations, sleep, eat properly, exercise, good hygiene.

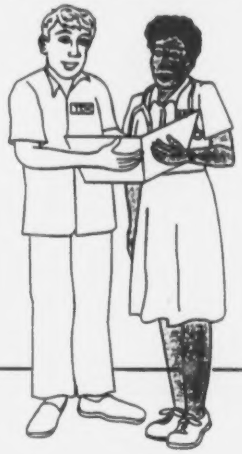
Minimize ill effects: early diagnosis (regular medical examinations), Early treatment

*(Concept by Ann Wormsley)

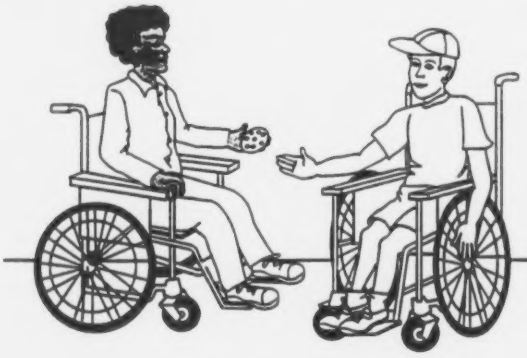
HO 2

WAYS ORGANISMS ARE SPREAD

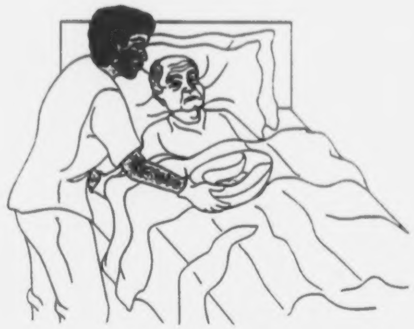
Ways Organisms are Spread



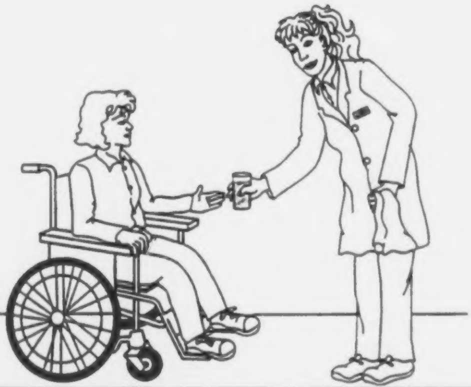
Health Care Assistant
to
Health Care Assistant



Client to Client



Client to Health Care Assistant
or
Health Care Assistant to Client



Equipment to Client
or
Health Care Assistant

BEST COPY AVAILABLE

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

SCOPE OF UNIT:

This unit covers an introduction to microorganisms, transmission of microorganisms, infection control, AIDS, and hepatitis. It includes procedures for hand washing and donning and removing gloves, gowns, and masks.

INFORMATION TOPIC: IV-3 AND DEMONSTRATION: IV-3

INFECTION CONTROL

OBJECTIVES - THE STUDENT SHOULD BE ABLE TO:

Information

1. Match terms in this lesson with their correct definitions.
2. Differentiate between medical asepsis and surgical asepsis.
3. Identify when respiratory isolation techniques are appropriate for client care.
4. List the purposes of Body Substance Precautions.
5. Identify the components included in Body Substance Precautions.
6. Determine appropriate personal protective equipment (PPE) when planning client care.
7. Identify approaches to clients' feelings about infection control techniques.

Demonstration

8. Wash hands according to steps of procedure.
9. Don and remove daily care nonsterile gloves according to steps of procedure.
10. Don and remove mask according to steps of procedure.
11. Don and remove gown according to steps of procedure.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Sterile Technique Procedures
2. HO 2: Stop Sign Alert
3. HO 3: Infection Control
4. HO 4: Biohazard Label
5. Water
6. Soap
7. Paper towel
8. Wastebasket
9. Hand lotion
10. Daily care nonsterile gloves
11. Mask
12. Gown
13. *Infection Control Techniques*, video #22, available from the Missouri Vocational Resource Center, 12 min.
14. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *Surgikos - Protective Asepsis*, video (T.F. #127), 15 min.
    b. *Making It Work*, video (T.F. #164), 30 min.
    c. *Safe Hand Washing*, video (T.F. #49), 10 min.
15. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 3 prior to class and be prepared to discuss the information presented and return the demonstrations on hand washing and donning and removing daily care nonsterile gloves, mask, and gown.

REFERENCES:

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 14.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 15.

Infection Control Protocol for Student Clinical Experiences: A Protocol Document for Health Occupations Programs in Missouri. Columbia, MO: Instructional Materials Laboratory, 1994.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 2.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 7.

INTRODUCTION:

Following infection control techniques is extremely important in preventing the spread of infectious diseases. Since the Body Substance Precaution system focuses on treating all moist body substances from all clients as potentially infectious, it is the infection control system presented. With the Body Substance Precaution system, health care workers need to utilize respiratory isolation techniques for individuals with an airborne illness or disease.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

A. Antiseptic - an agent which prevents infections in living tissues

B. Asepsis - the absence of viable pathogenic microorganisms, adj., *aseptic*

C. Autoclave - equipment used to sterilize health care materials and equipment through steam heat under pressure

D. Barriers - any precaution used to control the spread of infection (closed door, gloves, hand washing, masks, etc.)

E. Clean - an area or object that is not contaminated by pathogenic microorganisms

F. Contaminated - unclean; soiled with pathogenic microorganisms

G. Dirty - an area or object that is contaminated by pathogenic microorganisms

H. Disinfection - a process that destroys most pathogenic microorganisms on inanimate objects

I. Isolation techniques - special precautionary measures and procedures used in the care of patients with a contagious or communicable disease

J. Nosocomial infection - an infection acquired while in a health care facility

K. Sterile - absence of all microorganisms

L. Sterile field - an area that is free from all microorganisms

M. Sterilization - special procedure to destroy all microorganisms

II. Medical vs. Surgical Asepsis - methods followed to prevent the spread of pathogens for the protection of clients and personnel from infection or reinfection (HO 1) **(II-2)**

A. Medical asepsis - the removal or destruction of disease organisms or infected material by use of clean technique

1. Hand washing is one way to practice asepsis.

2. Wearing non-sterile gloves after hand washing is a another way to practice asepsis.

3. Equipment is identified as clean. Identification may be with a tag, a package, marked tape or some manner to indicate it is free of most organisms by cleaning.

4. Gloves may be in an open box or packaged but not double wrapped.

B. Surgical asepsis or sterile asepsis - protection against infection before, during, or after surgery by use of sterile technique

1. Sterile technique is the procedure for working with equipment and supplies so that microorganisms will not contaminate them.

2. Accomplished by exposure to extreme temperatures or gas that kills all microorganisms. An autoclave is an apparatus for the sterilization of materials by steam under pressure.

3. Sterile technique

    a. A sterile field is an area which is free of germs and contains sterile materials or equipment.

    b. A sterile field or equipment is always wrapped with a sterile cover. The sterile cover can be the inside cover of a glove wrap, a sterile sheet, or a sterile towel.

    c. Sterile supplies are always double wrapped in paper or cloth.

    d. Supplies are sealed with tape that changes color or becomes striped when the supplies are sterilized.

III. Respiratory Isolation Techniques are Indicated for Clients with Airborne Diseases

A. Respiratory Isolation may be indicated in the care of clients with contagious respiratory diseases.

1. The physician may request a private room.

2. Staff and visitors may be requested to wear a mask upon entering the client's room.

B. Purposes of Respiratory Isolation **(II-3)**

1. To prevent the spread of disease-producing germs (pathogens) by droplets that are coughed, sneezed, or breathed into the air.

    a. Tuberculosis

    b. Chicken Pox

    c. Mumps

2. To protect the infected client from further infection

3. To protect uninfected clients, visitors, and staff from being infected by germs from the respiratory system

4. Body Substance Precautions do not eliminate the need for isolation precautions for client's with respiratory infections that are caused by airborne pathogens.

C. The type of Respiratory Isolation depends upon the infection. A "Stop Sign Alert" sign will be placed on the door. Everyone must stop before entering to find out what barriers must be used. (HO 2)

1. Wear a mask

2. Door must be kept closed

3. There may be other special precautions, Strict Isolation involves mask, gown and gloves

D. Approaches for caring for clients in respiratory isolation

1. Be aware of and follow the measures being taken for Respiratory Isolation.

    a. There should be a "Stop Sign Alert" card posted for isolation. Follow recommendations given.

    b. Masks, gloves, and/or eye protection may be required for the health care assistant.

2. Always organize your work before going into the room. **(II-4)**

    a. Gather supplies and linens needed

    b. Request assistance if needed.

3. Remember hand washing before and after any client contact is the single most important means of preventing the spread of infection.

4. Gloves do not eliminate the need to wash your hands, they just provide a barrier between you and the client.

5. Articles or linens removed from a strict isolation room must be completely covered with a noncontaminated container.

6. The thermometer and blood pressure apparatus may be left in the room and not taken out of the room until the isolation is discontinued.

7. Never touch unnecessary articles in the room or one's face, hair, contact lens, or glasses when wearing gloves.

IV. Purposes of Body Substance Precautions **(II-5)**

A. To prevent the spread of disease-producing germs (pathogens)

B. To protect the infected client from further infection

C. To protect uninfected clients, visitors, and staff from being infected

V. Body Substance Precautions System - should be followed by **ALL** personnel at all times regardless of the diagnosis. (HOs 3 and 4) **(II-6)**

NOTE: Body Substance Precautions (BSP) provides a consistent approach to managing body substances from ALL clients and is essential in preventing transmission of potentially infectious agents. Although not identical with Universal Precautions as recommended by the Centers for Disease Control, the American Hospital Association, and Occupational Safety and Health Administration, BSP is consistent with Universal Precautions. BSP goes a step further and considers ALL blood and body fluids as potentially contagious, regardless of the client's diagnosis.

A. Hand washing - the single most important practice in preventing the spread of infections.

1. Wash hands before and after contact with a client.
2. Wash hands whenever soiled with body substances and before performing invasive procedures.
3. Always wash hands before donning and after removing gloves.
4. Pay particular attention to around and under fingernails and between fingers.

B. Personal protective equipment (PPE) **(II-7)**

1. Gloves - reduce the likelihood of contaminating the hands, however, dirty gloves are worse than dirty hands.
    a. Wear gloves when it is likely that hands will be in contact with mucous membranes, non-intact skin, and/or any moist body substances (blood, urine, feces, wound drainage, oral secretions, sputum, vomitus, or items/surfaces soiled with these substances).
    b. Gloves must be changed between clients.
    c. Gloves **must** be removed and discarded in the trash if torn or a needle stick or other injury occurs. A new glove is used promptly.
    d. Use sterile gloves for procedures involving contact with normally sterile areas of the body or when doing a sterile procedure.

    e. Use examination gloves (non-sterile) for procedures involving contact with mucous membranes and for client care that does not require the use of sterile gloves.

    f. Do not wash or disinfect surgical or examination gloves for reuse.

  2. Face and eye protection

    a. Wear masks and/or eye protection when it is likely that eyes and/or mucous membranes will be splashed with body substances (e.g., when emptying fluids).

    b. These items should be available for personnel when needed.

  3. Apron or gown

    a. Protect clothing with a plastic apron or gown when it is likely that clothing will be soiled with body substances.

    b. Aprons or gowns should be removed and discarded after completion of each client contact task.

C. Handling of sharps

  1. Discard needle/syringe units and sharps, i.e. razor blades, in puncture-resistant containers labeled specifically for this purpose.

  2. Containers should be located in a convenient, strategic location on every floor and should not be overfilled.

  3. Needles should not be recapped, bent, or broken by hand. Needles should be discarded directly into the needle disposal container.

  4. The "one-handed recapping technique" should be used in situations when it is necessary to recap needles. Needle-recapping devices should be used when recapping is necessary.

D. Laboratory specimens

  1. All specimens for the laboratory should be in leakproof containers.

  2. Individual specimens do not need to have the biohazard label if they are placed in a container with the biohazard label on it. If they are not placed in a labeled container, each individual specimen must have a biohazard label.

  3. If the outside of the container is contaminated, the specimen container should be discarded and another sample obtained.

  4. Treat all blood and body substances as if they are potentially infectious.

        a. **DO NOT** place “blood precautions,” “AIDS,” or other labels on specimens from clients with identified infections. This may encourage a false sense of security and potentially increase risk to personnel handling the specimens.

E. Soiled linen

1. Place soiled linens in laundry bags provided at the point of use.

2. Avoid contact with clothes.

3. Do not shake or place linen directly on the floor.

4. No special precautions should be followed for persons known to be infected. Therefore, like specimens, linen should not be labeled with identified infections.

5. Soiled linens that are slightly to moderately moist should be folded and/or rolled in such a way as to contain moist area in the center of the soiled linen.

6. Soiled linens that are saturated with moisture should be placed in a plastic bag and tightly secured.

    a. The plastic bag containing wet linens should be placed in an approved laundry bag and closed before transporting to the proper area.

7. When a bag is **not** more than 2/3 full, it is closed and deposited in the soiled linen container. **DO NOT** overfill bags, as overfilled bags tend to rupture if they are dropped.

F. Disposal of waste from clients’ rooms

1. All trash generated, with the exception of fluid-filled containers, can be disposed of in regular trash bags, as per regular practice.

2. Fluid-filled containers (e.g. suction canisters and hemovacs) may be emptied directly into a hopper or toilet.

    a. Personnel should wear protective attire (gloves, goggles) to protect themselves from splashes unless a splash shield is provided.

    b. If fluid-filled containers are disposed of without emptying, follow the infectious waste handling procedures of the facility.

3. Wound dressings should be disposed of in a manner so as to “confine and contain” any blood/body fluids that may be present.

    a. Small dressings can be enclosed in the disposable glove used to remove the dressing.

            1. Pull the glove off inside out containing the dressing inside of it.

            2. This dressing and the gloves can then be discarded into the regular trash.

        b. Larger dressings should be removed using gloved hands and placed into an impervious bag.

            1. Small plastic bags are usually available as a "dressing change bag." This bag can be used for the old dressings, gloves, and other trash from the dressing procedure. The bag can then be deposited in the regular trash container.

    G. Cardiopulmonary resuscitation

        1. Because of the risk of salivary transmission of infectious diseases, use resuscitation devices located in designated areas of the facility.

        2. Disposable resuscitation devices should be used once and disposed of or, if reusable, thoroughly cleaned and disinfected after each use.

    H. Client placement

        1. The physician and persons responsible for infection control should assess individual clients for their potential to transmit infectious organisms. Room assignments and restriction of activities are determined by this assessment.

VI. Client Feelings About Infection Control Techniques

    A. Client may feel lonely, rejected, or "dirty" especially when placed in Respiratory Isolation **(II-8)**

        1. Mask, gloves, and/or gown barriers are associated with a sense of being "untouchable"

        2. Less client contact with staff is the result of hurriedness to exit the isolation room

    B. There is less trauma associated with Body Substance Precautions.

        1. **All** moist body substances from **ALL clients** are treated as potentially infectious rather than focusing only on clients with diagnosed infectious diseases.

        2. Appropriate barriers are used only at appropriate times resulting in the client having more staff contact.

    C. Methods that assist clients in dealing with the precautions or isolation techniques; **(II-9)**

1. Explain the reasons for the precautions or isolation. Point out that the method employed to prevent the spread of the germs causing the disease will also assist in the client's recovery.

2. When Isolation is utilized be sure to check at regular intervals to reduce the clients' feelings of being isolated from the world. Encourage others to do so.

3. Plan time to be with clients. Listen to their concerns, fears, or need to socialize. The need for communication, stimulation, and touch still exist.

VI. Demonstrate Procedures for Washing Hands, Donning and Removing Daily Care Nonsterile Gloves, Donning and Removing a Mask, and Donning and Removing a Gown.

VII. Summary and Conclusion

A. Terms and definitions

B. Medical vs. surgical asepsis

C. Respiratory isolation techniques are indicated for clients with airborne diseases

D. Purposes of Body Substance Precautions

E. Body Substance Precautions System

F. Client's feelings about infection control techniques

G. Review procedures for hand washing, donning and removing daily care nonsterile gloves, donning and removing a mask, and donning and removing a gown.

You should have a better understanding of germs and the importance of controlling them in the health care environment. Hand washing is so simple but often is neglected. Take time to protect everyone--yourself, your family, coworkers, and the clients. The next lesson is on AIDS and the health care worker.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

STEPS OF PROCEDURE FOR WASHING HANDS:

1. Roll up your sleeves. It is recommended that rings and watches are not worn during procedures. If it is necessary, keep watch and rings on for washing.
2. Turn on water with knee, foot, or hand controls; adjust temperature so it is comfortable for you.

   CAUTION: Do not turn controls during procedure.
3. Wet hands thoroughly, including two to three inches above wrists; hold hands with wrists lower than elbows and fingertips pointed downward.
4. Apply a generous amount of soap to hands. If using bar soap, rinse it well before lathering and before returning it to the dish.
5. Scrub hands for at least 15 seconds:
   a. Wash palms and back of hands with at least ten circular motions.
   b. Wash fingers and between fingers with at least ten circular motions.
   c. Wash wrists with at least ten circular motions.
   d. Wash rings and watch thoroughly. Wash under ring bands and watch band.
6. Rinse wrists and hands well--keep wrists lower than elbows.
7. Dry hands well with paper towel or fresh clean towel, using one for each hand.
8. Turn off faucet with dry paper towel.
9. Discard paper towel. Be careful not to touch the part that touched the faucet.
10. Apply hand lotion if desired.

STEPS OF PROCEDURE FOR DONNING AND REMOVING DAILY CARE NONSTERILE GLOVES:

Donning gloves:
1. Wash and dry hands.
2. Remove gloves from box, one at a time.

3. Place your hand through opening and pull the glove up to the wrist.

4. Repeat with second glove.

5. Adjust gloves to cover your wrists or cuffs of gown.

6. Complete client care.

Removing gloves:

7. Grasp one glove on the inside of wrist at ½" below band of dirty side of glove without touching your skin.

8. Pull glove down turning it inside out to cover the thumb and finger line.

   CAUTION: Do not completely remove the glove.

9. With covered thumb and finger, pinch second glove at inside wrist area.

10. Pull glove down until it is inside out over fingers.

11. Touch only inside surfaces of gloves and remove gloves from both hands.

12. Discard gloves by dropping them in appropriate container.

13. Wash hands.

STEPS OF PROCEDURE FOR DONNING AND REMOVING MASK:

Donning mask:

1. Wash hands.

2. Pick up mask.

3. Adjust mask over your nose and mouth.

4. Tie top string behind head.

5. Tie lower string behind head.

6. Complete client care.

   NOTE: Replace mask if it becomes moist.

Removing mask:

7. Wash hands.

   NOTE: If wearing gloves remove them before washing hands.

8. Untie bottom string.

9. Untie top string.
10. Remove by holding top strings.
11. Discard by dropping mask in approved container in client's room.
12. Wash hands.

STEPS OF PROCEDURE FOR DONNING AND REMOVING GOWN:

Donning gown:

1. Remove wrist watch and place on clean side of a paper towel.
2. Wash hands.
3. Don mask if necessary for procedure.
4. Unfold gown with opening at the back.
5. Put on gown by slipping arms into sleeves.
6. Slip fingers inside neck band.
7. Tie neck tie in back or fasten strips.
8. Grasp waist ties in front and bring to back.
9. Reach behind and overlap edges of gown.
10. Bring waist ties in front and tie.
11. Don gloves.
12. Complete client care.

Removing gown:

13. Untie waist tie.
14. Remove gloves and dispose in appropriate container in the room.
15. Turn faucet on with clean paper towel.
16. Wash and dry hands.
17. Turn off faucet with clean, dry paper towel.
18. If wearing mask, remove mask holding it by ties only and discard in approved container.
19. Untie ties at neck and loosen gown at neck.

20. Slip fingers of one hand inside the cuff of the other hand.

NOTE: Do not touch the outside of the gown.

21. Pull gown down over hand.

22. With gown-covered hand, pull gown down over other hand.

23. Fold gown away from your body with contaminated side inward.

24. Roll gown into a ball.

25. Discard gown in proper receptacle.

26. Turn on faucet with clean paper towel.

27. Wash hands.

28. Turn off faucet with clean, dry paper towel.

29. Remove watch from clean side of paper towel.

30. If in isolation, open door with paper towel. Use toe to keep door open while disposing towel in trash receptacle before leaving client's room.

31. Wash hands.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

INTERACTION ITEMS:

1. What is the definition of clean, dirty, asepsis, aseptic, autoclave, antiseptic, disinfection, sterile field, nosocomial infection, contaminated, sterile, sterilization, and barriers?

2. How do medical and surgical asepsis differ?

3. What is the purpose of Respiratory Isolation techniques?

4. Why is organization of your work considered to be a very important factor when caring for a client in isolation?

5. What is the purpose of Body Substance Precautions?

6. What are the main components of Body Substance Precautions System?

7. How do you determine what type of personal protective equipment (PPE) to use?

8. What do you think the feelings of a client might be if they are in isolation for three or four days with only a few visitors ?

9. Is there anything you could do to help clients deal with their feelings about being isolated from others?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have a class discussion on what to do if you see someone handling blood without gloves.

2. Have students observe hand washing techniques where they work. Students could then report their observations with the class.

3. Instructor demonstrates handling laboratory specimens and soiled linens.

4. The instructor demonstrates the following procedures. Then the students practice the procedures.

   a. Hand washing
   b. Donning and removing gloves
   c. Donning and removing gown
   d. Donning and removing mask

5. If time allows, demonstrate opening a sterile package, adding sterile material to a sterile field, and donning sterile gloves. Procedures are included as HO 3.

ANSWERS TO EVALUATION ITEMS:

1. c
2. e
3. a
4. d
5. b
6. c
7. a
8. e
9. b
10. d
11. b
12. d
13. c
14. a
15. c
16. d
17. a
18. b
19. a

20. Surgical asepsis provides protection against infection before, during, or after surgery by use of sterile technique. Medical asepsis is the removal or destruction of disease organisms or infected material by the use of clean technique.

21.
    a. To prevent the spread of disease-producing germs (pathogens)
    b. To protect the infected client from further infection
    c. To protect uninfected clients, visitors, and staff from being infected

22. c

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with their correct definitions in Column II.

Column I

____ 1. Nosocomial infection

____ 2. Sterile

____ 3. Clean

____ 4. Dirty

____ 5. Autoclave

Column II

a. An area or object which is not contaminated by pathogenic microorganisms

b. Equipment used to sterilize materials and equipment through steam heat under pressure

c. An infection acquired while in a health care facility

d. An area or object which is contaminated by pathogenic microorganisms

e. Absence of all microorganisms

Match the terms in Column I with their correct definitions in Column II.

Column I

____ 6. Asepsis

____ 7. Barriers

____ 8. Contaminated

____ 9. Sterile field

____ 10. Sterilization

Column II

a. Any precaution used to control the spread of infection

b. An area that is free from all microorganisms

c. The absence of viable pathogenic microorganisms

d. Special procedure to destroy all microorganisms

e. Soiled with pathogenic microorganisms

Circle the letter that corresponds to the best answer.

11. Which one of the following correctly explains the purpose of Respiratory Isolation?
    a. It provides a private room for the client.
    b. It prevents the spread of germs to uninfected clients, visitors, and staff.
    c. It does not protect the infected client from further infection.
    d. It only protects the client not the health care assistant.

12. When should you wear a mask when giving client care?
    a. Wear a mask all day.
    b. Wear a mask when handling contaminated sharps.
    c. Wear a mask when the client has a disease that is transmitted by vehicle transmission.
    d. Wear a mask when it is likely that mucous membranes will be splashed.

13. When you see the "Stop Sign Alert" you know that:
    a. You cannot give the assigned care to that client.
    b. No visitors will be allowed.
    c. You must check to see what barrier(s) must be used before entering the room.
    d. A cap, gown, gloves, and mask must be donned before entering the room.

14. Elements of the Body Substance Precautions System include:
    a. Hand washing and wearing gloves, gown, or face and eye protection as appropriate.
    b. Hand washing and wearing gloves, gown, or face and eye protection depending on client diagnosis.
    c. Wearing gloves, gown, and face and eye protection in isolation only.
    d. Wearing gloves, gown, and face and eye protection only for bloodborne pathogens.

15. Which of the following is an important factor to remember when caring for clients when utilizing Body Substance Precautions?
    a. Gloves will be used only when there is contact with urine.
    b. The signs will tell you what you need to do before entering a client's room.
    c. Always wash your hands before and after contact with the client.
    d. You will never need to wear mask and gown when clients are in Body Substance Precautions.

16. The most important measure the health care assistant can do to prevent the spread of disease is:
    a. Wear a mask.
    b. Sterilize all equipment.
    c. Wear a gown.
    d. Wash hands.

17. Which of the following is proper hand washing procedure for clean technique?

   a. Scrub hands for 15 seconds
   b. Scrub hands for one (1) minute
   c. Scrub hands for five (5) minutes
   d. Scrub hands for ten (10) minutes

18. How should slightly moistened linens be handled?

   a. Folded and/or rolled so that moist area is on the outside
   b. Folded and/or rolled so that moist area is in center of the soiled linen
   c. Folded and/or rolled and double bagged
   d. Folded and/or rolled and transported in a bag with a biohazard label.

19. Why may clients feel lonely, rejected, or dirty when a mask, gloves, and a gown are used in Respiratory Isolation?

   a. These barriers are associated with a sense of being "untouchable."
   b. These barriers are only used for some clients.
   c. The mask changes colors when it becomes contaminated.
   d. The gloves feel cold to the client.

20. How does surgical asepsis differ from medical asepsis?

____

____

____

____

21. What are the three purposes of Body Substance Precautions?

a.____

b.____

c.____

22. Ms. Sanders has been admitted to the hospital after being diagnosed with a brain tumor. As the nurse assistant assigned to her care, you know that you need to apply Body Substance Precautions. Which of the following personal protective equipment would you select to provide her perineal care?

a. Non-sterile gloves
b. Non-sterile gloves, apron, and face protective mask
c. Non-sterile gloves and protective face mask
d. Non-sterile gloves and apron

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV: CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS:

NAME OF STUDENT: ______________

WASH HANDS

EQUIPMENT:

1. Water
2. Soap
3. Paper towels
4. Wastebasket
5. Hand lotion

CHECK IF THE STUDENT DID THE FOLLOWING		YES	NO
1.	Remove watch and/or rings, roll up sleeves. (Wash watch and rings if they have come into contact with contaminated materials.) NOTE: Place watch and/or rings on clean paper towel.		
2.	Turn on water with knee, foot, or hand controls, adjust temperature so it is comfortable for you. CAUTION: Do not turn controls during procedure.		
3.	Wet hands thoroughly, including and 2"-3" above wrists; hold hands with wrists lower than elbows and fingertips pointed downward.		
4.	Apply generous amount of soap to hands. If using bar soap, rinse it well before lathering and before returning it to the dish.		
5.	Scrub hands for at least 15 seconds: a. Wash palms and back of hands with at least ten circular motions.		
	b. Wash fingers and between fingers with at least ten circular motions.		
	c. Wash wrists with at least ten circular motions.		
6.	Rinse wrists and hands well; keep wrists lower than elbows.		
7.	Dry hands well with paper towel or fresh clean towel, using one for each hand.		
8.	Turn off faucet with dry paper towel.		
9.	Discard paper towel. Be careful not to touch the part that touched the faucet.		

10. Apply hand lotion if desired.		

The student has satisfactorily completed the procedure "WASH HANDS" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ____________

DON AND REMOVE DAILY CARE NONSTERILE GLOVES

EQUIPMENT:

1. Water
2. Soap
3. Paper towels
4. Nonsterile gloves

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
Donning gloves: 1. Wash and dry hands.		
2. Remove gloves from box, one at a time.		
3. Place your hand through opening and pull the glove up to the wrist.		
4. Repeat with the second glove.		
5. Adjust gloves to cover your wrists or cuffs of gown.		
6. Complete client care.		
Removing gloves: 7. Grasp one glove on the inside of wrist at ½" below band of dirty side of glove without touching your skin.		
8. Pull glove down turning it inside out to cover the thumb and finger line. CAUTION: Do not completely remove the glove.		
9. With covered thumb and finger, pinch second glove at inside wrist area.		
10. Pull glove down until it is inside out over fingers.		
11. Touch only inside surfaces of gloves and remove gloves from both hands.		
12. Discard gloves by dropping them in appropriate container.		
13. Wash hands.		

The student has satisfactorily completed the procedure "DON AND REMOVE DAILY CARE NONSTERILE GLOVES" according to steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ______________

DON AND REMOVE MASK

EQUIPMENT:

1. Water
2. Soap
3. Mask

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
Donning mask: 1. Wash hands.		
2. Pick up mask.		
3. Adjust mask over your nose and mouth.		
4. Tie top string behind head.		
5. Tie lower string behind head.		
6. Complete client care. NOTE: Replace mask if it becomes moist.		
Removing mask: 7. Wash hands. NOTE: If wearing gloves, remove them before washing hands.		
8. Untie bottom string.		
9. Untie top string.		
10. Remove by holding top strings.		
11. Discard by dropping mask in approved container in client's room.		
12. Wash hands.		

The student has satisfactorily completed the procedure "DON AND REMOVE MASK" according to steps outlined.

_______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ______________

DON AND REMOVE GOWN

EQUIPMENT:

1. Water
2. Soap
3. Paper towels
4. Gown
5. Mask (optional)
6. Gloves (optional)

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
Donning gown: 1. Remove wrist watch and place on clean side of a paper towel.		
2. Wash hands.		
3. Don mask if necessary for procedure.		
4. Unfold gown with opening at the back.		
5. Put on gown by slipping arms into sleeves.		
6. Slip fingers inside neck band.		
7. Tie neck tie in back or fasten strips.		
8. Grasp waist ties in front and bring to back.		
9. Reach behind and overlap edges of gown.		
10. Bring waist ties in front and tie.		
11. Don gloves.		
12. Complete client care.		
Removing gown: 13. Untie waist tie.		
14. Remove gloves and dispose in appropriate container in the room.		
15. Turn faucet on with clean paper towel.		
16. Wash and dry hands.		
17. Turn off faucet with clean, dry paper towel.		

18. If wearing mask, remove mask holding it by ties only and discard in approved container.		
19. Untie ties at neck, and loosen gown at neck.		
20. Slip fingers of one hand inside the cuff of the other hand. NOTE: Do not touch the outside of the gown.		
21. Pull gown down over hand.		
22. With gown-covered hand, pull gown down over other hand.		
23. Fold gown away from your body with contaminated side inward.		
24. Roll gown into a ball.		
25. Discard gown in proper receptacle.		
26. Turn on faucet with clean paper towel.		
27. Wash hands.		
28. Turn off faucet with clean, dry paper towel.		
29. Remove watch from clean side of paper towel.		
30. If in isolation, open door with paper towel. Use toe to keep door open while disposing towel in trash receptacle before leaving client's room.		
31. Wash hands.		

The student has satisfactorily completed the procedure "DON AND REMOVE GOWN" according to steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

STERILE TECHNIQUE PROCEDURES

Opening a Sterile Package

1. Wash hands.
2. Check tape seal color or expiration date.
3. Place package on table with folds up.
4. Remove tape.
5. Unfold flap farthest away from you by grasping it with thumb and forefinger.
6. Open right flap with your right hand by grasping the outer surface with your thumb and forefinger.
7. Open left flap with your left hand by grasping outer surface with thumb and forefinger.
8. Touching only the outside of the flap, open flap nearest you.

Adding Sterile Material to a Sterile Field

1. Wash hands.
2. Check tape seal color or expiration date.
3. With both hands, grasp each side of the package and pull it apart.
4. Open package.
5. Hold over sterile field.
6. Drop contents onto sterile field.

Donning Sterile Gloves

1. Wash and dry hands.
2. Check glove wrap seal or expiration date.
3. Open seal.
4. Open outer cover by holding edges between the fingers and pulling in opposite directions.

5. Lift inner covering to expose the gloves.

6. If gloves are not already powdered, powder hands.

7. Discard powder packet in waste container.

8. Pick up right glove with your left hand.

9. Slip thumb of left hand inside edge of right glove at the wrist.

10. Grasp glove at edge.

11. Lift glove free of covering and table.

12. Step back a few steps.

13. Curve right hand with thumb toward your palm.

14. Using a rotating motion, pull glove on with left hand.

15. When the right glove is on, let go with your left hand.

    CAUTION: Do not pull cuff over wrist.

16. Put on left glove by holding gloved fingers of right glove together.

17. Slip gloved fingers under the cuff of the left glove.

18. Lift glove clear of table and wrapping.

19. Curve fingers of left hand with thumb slightly touching the inner aspect of your forefinger.

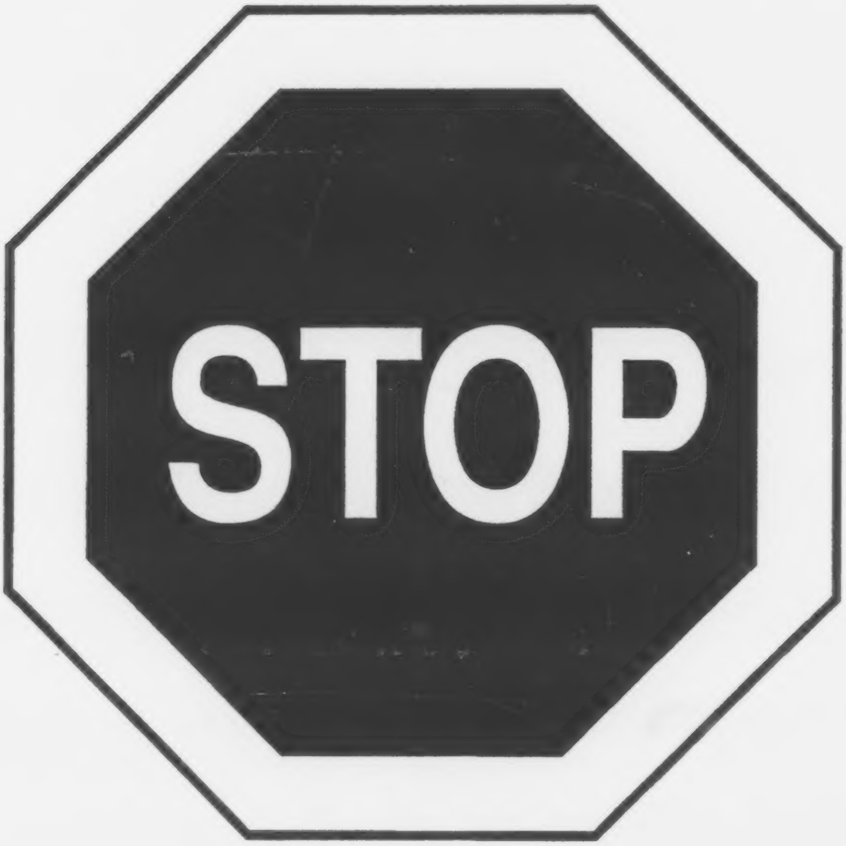
20. Insert left hand into glove by spreading fingers to go into the correct finger opening.

21. Adjust cuffs by slipping gloved fingers of right hand into cuff of left glove.

22. Position cuff by pushing toward arm.

HO 2

STOP SIGN ALERT



SEE THE NURSE BEFORE ENTERING

INFECTION CONTROL

A system of infection prevention and control currently in use is called Body Substance Precautions (BSP). This system focuses on keeping all moist body substances (blood, feces, urine, wound drainage, tissues, oral secretions, and other body fluids) from the hands of personnel. This is done primarily by increased glove usage and hand washing. The Body Substance Precautions system is consistent with recommendations from the Centers for Disease Control (CDC), the American Hospital Association, and Occupational Safety and Health Administration (OSHA) that point out the need to consider ALL blood and ALL body fluids as potentially contagious regardless of the client's diagnosis. In order to comply with the CDC policies, the following recommendations should be used. The need to use barriers must focus on the caregivers' (health care assistants') routine contact with the clients.

Because a medical history and examination cannot reliably identify all persons with infectious diseases, we treat ALL blood and body substances as potentially infectious rather than to focus precautions only on the clients that are diagnosed with infectious diseases.

Implementing the Body Substance Precautions System includes the following elements and should be followed by ALL personnel at all times, regardless of the client's diagnosis.

Body Substance Precautions

1. Wear gloves when it is likely that hands will be in contact with mucous membranes, non-intact skin and/or any moist body substance, (blood, urine, feces, wound drainage, oral secretions, sputum, vomitus, or items/surfaces soiled with these substances). Gloves should be changed and hands washed between clients. If a glove is torn or a needle stick or other injury occurs, the glove should be removed, discarded in appropriate container, hands washed, and a new glove used promptly as client safety permits.

   REMEMBER: Gloves are not a cure-all. They reduce the likelihood of contaminating the hands, but hands should be washed after removal of the gloves.

   a. Use examination gloves for procedures involving contact with mucous membranes, unless otherwise indicated, and for other client care procedures.

   b. Change gloves and wash hands between clients.

   c. Do not wash or disinfect examination gloves for reuse.

   d. Use general purpose utility gloves (e.g., rubber household gloves) for housekeeping or instrument cleaning involving blood contact. These utility gloves may be decontaminated and reused but should be discarded if they are peeling, cracked, or discolored; or if they have punctures, tears, or other evidence of deterioration.

2. Wash hands often, always between clients' care and after any contact with body substances or contaminated materials. Pay particular attention to around and under fingernails and between fingers. Always keep your hands away from your face or you may give (inoculate) yourself with the infectious organisms.

3. Wear masks and/or eye protection when it is likely that eyes or mucous membranes will be splashed with body substances (your charge nurse will give you further direction).

4. Protect your clothing with a plastic apron or gown when it is likely that clothing will be soiled with body substances.

5. Health care workers with draining lesions or weeping dermatitis must refrain from all direct client care and from handling client care equipment until cleared by a physician. These conditions put the employee and the client at risk of infection.

6. Discard trash in plastic bags according to facility policy.

7. If the client has a disease which is transmitted in whole or part by the airborne route, use the "Stop Sign Alert" on the client's door. This will allow the nurse to give the individuals wishing to enter the room specific instructions regarding the client (e.g., tuberculosis). The nurse instructs non-immune persons to not enter the room of persons with specific diseases (e.g., chicken pox, measles, mumps). Precautions for clients with airborne diseases include: private room, "Stop Sign Alert" on door, and door closed.

8. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

Some Examples of Situations Using the Body Substance Precautions System

1. Follow Body Substance Precautions when caring for clients with bowel and/or bladder problems.

   It is difficult to clean an incontinent client without getting urine and/or stool on the hands. Gloves should be worn routinely and for helping clients with toileting activities. One major risk is getting germs underneath the caregiver's fingernails. Gloves reduce this risk and make hand washing after completing the task easier and more efficient. A plastic gown may also be needed for cleaning incontinent clients and for changing their clothes and the bed linen. Obtain the plastic apron before the tasks are begun.

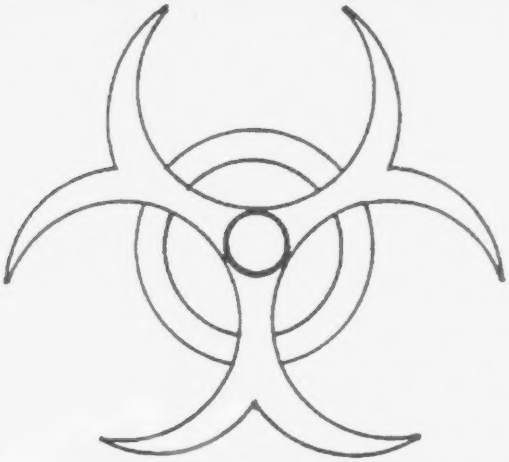
2. When a care provider is emptying a urinary catheter bag, this should be viewed as a single interaction to a single client and the tasks for one client should be completed before going to the next client.

   Wearing gloves for emptying catheter bags is wise because it is difficult not to get urine on your hands. It is unacceptable to consider it a single task to empty the catheter bags for several clients in sequence without changing gloves and washing hands between clients. This is because of the real risk of transmitting organisms from the catheter bag drainage spout of one client to the next client's drainage spout on the hands of personnel.

3. When a client has a rash or skin lesions on his/her body, it could be due to any number of causes. The lesions may be due to varicella (chicken pox or zoster), herpes simplex, scabies, syphilis, impetigo, a drug reaction or other causes. Prompt recognition of the rash, identification of the cause, prompt appropriate intervention, and proper usage of gloves and hand washing can prevent transmission of organisms to other clients and care providers.

BIOHAZARD LABEL

BIOHAZARD



LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT

UNIT IV: CONCEPTS OF MICROBIOLOGY

SCOPE OF UNIT:

This unit covers an introduction to microorganisms, transmission of microorganisms, infection control, AIDS, and hepatitis. It includes procedures for hand washing and donning and removing gloves, and masks.

INFORMATION TOPIC: IV-4 OR DEMONSTRATION:

ACQUIRED IMMUNODEFICIENCY SYNDROME AND THE HEALTH CARE WORKER

(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms with the correct definition.
2. Describe acquired immunodeficiency syndrome (AIDS).
3. Describe the incubation period of AIDS.
4. Identify the cause of AIDS.
5. Name two tests used to diagnose AIDS.
6. Identify individuals at risk of contracting AIDS.
7. Identify symptoms of AIDS.
8. Describe the treatment for AIDS.
9. Explain how the AIDS virus is spread.
10. Describe misconceptions regarding transmission of the AIDS virus.
11. List ways to prevent getting AIDS.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: How the HIV Infection Attacks the Immune System
2. HO 2: AIDS Cases by Age

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 4 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

U.S. Department of Health and Human Services. *Recommendations for Prevention of HIV Transmission in Health-Care Settings*. Vol. 36/No. 25. Atlanta: Centers for Disease Control, 1987.

Missouri Department of Health. *Important AIDS Information for Health Professionals*. Jefferson City: Missouri Division of Health, 1985.

Ulene, Art. *Safe Sex in a Dangerous World; Understanding and Coping with the Threat of AIDS*. New York: Random House, 1987.

U.S. Public Health Service. *Surgeon General's Report on Acquired Immune Deficiency Syndrome*.

Schere, Jeanne C. *Introductory Medical-Surgical Nursing*. 4th ed. Philadelphia: J.B. Lippincott, 1986.

DeWit, Susan C. *Keane's Essentials of Medical-Surgical Nursing*. 3rd ed. Philadelphia: W.B. Saunders, Co., 1992.

Burhoe, Steven A. *Bloodborne Pathogens: An Overview for Health Care Providers*. University of Missouri-Columbia: Instructional Materials Laboratory, 1992.

Schniedman, Rose, Susan Lambert; Barbara Wander. *Being A Nurse Assistant*. 5th ed. The Hospital Research and Educational Trust, Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1989.

Annual Report HIV, 1992. Missouri Department of Health, American Medical Association, Division of Health Science, 515 North State Street, Chicago, IL 60610, *HIV Early Care AMA Physicians Guidelines*, 1990.

AIDS Education Resource Guide. Jefferson City, MO: Missouri Department of Elementary and Secondary Education, 1990.

HIV/AIDS Newsletter. Missouri Department of Health, Bureau of AIDS Prevention, June 1995.

INTRODUCTION:

AIDS (acquired immunodeficiency syndrome) is the name given to a medical condition recognized in 1981 that affects the body's natural immunity against disease.

On December 6, 1991, the OSHA Bloodborne Pathogen Standard was issued to protect health care providers. The standard mandates engineering controls, work practices, and personal protective equipment that, coupled with employee training, will reduce on-the-job risks for all employees occupationally exposed to blood or other potentially infectious material. This lesson on AIDS will show you why these regulations are so important. It will also provide you with correct and up-to-date information about AIDS. AIDS is everyone's concern.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV: CONCEPTS OF MICROBIOLOGY

OUTLINE:

I. Terms and Definitions (HO 1) **(II-1)**

A. AIDS - acquired immunodeficiency syndrome: a condition characterized by the collapse of the body's natural immunity against disease

B. Active immunity - that acquired by producing one's own antibody

C. Asymptomatic - show no signs or symptoms of infection

D. Bisexual - homosexual and heterosexual relations

E. Fatigue - extreme tiredness

F. HIV - human immunodeficiency virus

G. Homosexual - characterized by sexual attraction felt by a person for another person of the same sex

H. Immune deficiency - a lack of immune bodies and resultant impairment of the immune response to foreign agents (e.g., the body doesn't have enough white blood cells to fight off a disease or infection)

I. Immunity - resistance to a specific disease

J. Incubation period - from the time of contact with a communicable disease until you come down with the first symptom of the disease.

K. Leukocytes - white blood cells whose chief function is to protect the body against pathogenic microorganisms

L. Lymphocytes - a type of white blood cell. They are a product of lymphoid tissue and important in the development of immunity

M. Monogamous - having only one mate

N. Mutation - changing of form to a new variety. A cell form changes from normal to abnormal

O. OSHA - the Occupational Safety and Health Administration

P. Parenteral - piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions

Q. Passive immunity - acquired by receiving antibody from a source other than one's own body - e.g. vaccines given for various communicable diseases

R. Presumptive - something presumed as true

S. Semen - fluid secreted by the male testes; a male reproductive cell produced in the testes which is capable of uniting with an ovum and developing a new organism

T. Seropositive - antibodies to HIV appear in the blood stream

II. Description of Acquired Immunodeficiency Syndrome (AIDS)

A. AIDS is a relatively new disease. Even though there are several theories about the origin of the AIDS virus, the exact origin is not known.

B. AIDS is caused by a virus known as HIV (human immunodeficiency virus) **(II-2)**

C. An individual can be HIV infected but have no symptoms. Until symptoms appear, the individual is considered HIV positive. Once symptoms appear, the individual is considered to have AIDS.

D. AIDS is a fatal disease with no known cure although much research is presently being done to find a cure. Several types of vaccines are in the experimental stages.

E. AIDS is the last stage of an HIV infection.

III. Incubation Period

A. Incubation period is the period between contact with the virus and the start of symptoms and signs; the time may be as long as 16 years.

B. Most people become seropositive (show antibodies to HIV in the blood stream) approximately three months after infection. **(II-3)**

C. Usually the first six months to a year after exposure there are no signs or symptoms of the disease.

D. The asymptomatic period can last as long as seven to ten years, and some authorities say as long as 16 years.

IV. Cause

A. Caused by infection with the Human Immunodeficiency Virus (HIV)

B. HIV is a human retro virus. The virus enters the body, then infects a normal cell, causing an abnormal cell that can produce more viruses.

C. The HIV attacks and cripples an important type of T cell (lymphocyte - white blood cell), eventually destroying all of the T cells or T helpers. **(II-4)**

D. The individual's immune response is seriously impaired when the T cell (T helper or lymphocyte cell) is destroyed.

V. Diagnostic Tests

A. A blood test can detect the presence of antibodies to the HIV virus in the individual's blood stream. This test only indicates the person has been exposed to the HIV virus, not that he/she has the disease. **(II-5)**

1. ELISA - used to diagnosis HIV infection (positive is presumptive for AIDS).

2. Western blot - used to diagnose HIV infection (positive is confirming for AIDS).

VI. Individuals at Risk of Contacting AIDS (HO 2) **(II-6)**

A. People who have multiple sexual partners, male or female

B. People who have injected illegal drugs

C. People who have received blood transfusions or blood products prior to 1985

D. Infants born to infected mothers

VII. Symptoms of AIDS **(II-7)**

A. Dry cough

B. Loss of appetite

C. Weight loss greater than 10 pounds without dieting

D. Recurrent fever of 100°F

E. Drenching night sweats

F. Recurrent diarrhea

G. Fatigue - extreme or constant tiredness

H. Swollen lymph glands in the neck, underarms, and groin

I. Skin rashes - purple blotches or bumps on the skin that look like bruises but do not disappear

J. White spots in the mouth or on the tongue

K. Neurologic disorders

L. Opportunistic infections

1. Pneumonia - caused by the pneumocystis carinii, a protozoan

   a. The organism enters the lungs, multiplies and forms cyst packs that gradually occupy air space. The client gradually suffocates. It is contagious and there is no treatment.

2. Kaposi's sarcoma - a rare malignant disease. It produces tumors derived from skin and lymphoid tissue. The tumors are also found on internal organs.

VIII. Treatment

A. There is NO KNOWN cure for AIDS. **(II-8)**

B. There are some drugs given to improve the immune system's resistance to disease.

C. Stress reduction and imagery are used to assist the client with AIDS. Stress has an adverse effect on the immune system.

IX. How AIDS Is Spread **(II-9)**

A. By sexual contact (penis/vagina, penis/rectum, mouth/vagina, mouth/penis, mouth/rectum) with an infected person

B. By using needles or other injection equipment that an infected person has used (e.g., needles used by intravenous drug users, equipment used to tattoo or pierce ears)

C. By accidentally sticking yourself with a needle or other sharp used on an infected person

D. From an infected mother to her infant before or during birth and possibly through breast feeding

E. Receiving infected blood, blood products, or organs

NOTE: Since 1985 all donated blood has been tested to determine whether it is infected with the AIDS virus. The test cannot completely eliminate all infected blood. It is possible for someone to donate blood or plasma shortly after becoming infected with the AIDS virus, or before their blood has produced antibodies that can be found by current blood tests. Although the current blood test are highly accurate and the risk of contacting AIDS is extremely low, more specific tests are being developed to make blood and plasma products even safer.

F. Although no transmission from deep, open-mouth (i.e., French) kissing has been documented, such kissing theoretically could transmit the AIDS virus from an infected to an uninfected person through direct exposure of mucous membranes to infected blood.

X. Misconceptions Regarding Transmission of the AIDS Virus **(II-10)**

A common misconception regarding transmission of the AIDS virus is that it can be spread through casual contact. Studies have shown that AIDS cannot be spread by casual contact. The virus is NOT spread by any of the following methods:

A. Normal kissing

B. Shaking hands

C. Using public toilet seats

D. Drinking from water fountains

E. Mosquitos or other insects

F. Eating at the same table as an infected person

G. Hugging or touching an infected person

H. Eating food prepared by a person who has AIDS

I. Donating blood or having a blood test

J. Playing sports or games with persons with AIDS

K. Using public showers, bathrooms, or swimming pools

XI. Ways to Prevent Getting AIDS **(II-11)**

A. The risk of becoming infected with the AIDS virus can be virtually eliminated by not engaging in sexual activities and by not using illegal intravenous drugs.

B. Sexual transmission of the AIDS virus is not a threat to those uninfected individuals who engage in mutually monogamous sexual relations.

C. Using a latex condom for sexual activities is NOT 100% effective in preventing the spread of AIDS. A common spermicide, non-oxynol-9, has been known to kill the AIDS virus in laboratory tests.

D. In the health care field, always wear gloves when it is likely that you will be in contact with blood or other potentially infectious diseases.

NOTE: MORE INFORMATION ABOUT AIDS CAN BE OBTAINED BY CONTACTING:

MISSOURI DEPARTMENT OF HEALTH
BUREAU OF AIDS PREVENTION
P.O. BOX 570
JEFFERSON CITY, MO 65102

573/751-6438

XII. Summary and Conclusion

A. Terms and definitions

B. Description of Acquired Immuno Deficiency Syndrome (AIDS)

C. Incubation period

D. Cause

E. Diagnostic tests

F. Individuals at risk of contacting AIDS

G. Symptoms of AIDS

H. Treatment

I. How AIDS is spread

J. Misconceptions regarding transmission of the AIDS virus

The next lesson is on hepatitis.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms presented in this lesson?
2. What pathogen causes AIDS?
3. When do most people show antibodies to HIV in the blood stream?
4. What is a T cell or T helper?
5. What diagnostic tests are done for AIDS?
6. What individuals are at risk of contacting AIDS?
7. What are the symptoms of AIDS?
8. What is the treatment for AIDS?
9. How is AIDS spread?
10. What are eight misconceptions regarding transmission of the AIDS virus?
11. How can you prevent getting AIDS?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Contact any of the following for information on AIDS:
    a. National AIDS Information Clearinghouse - (800) 458-5231
    b. STD Hotline - (800) 227-8922
    c. AIDS Hotline - (800) 342-AIDS
    d. Bureau of AIDS Prevention, Missouri Department of Health - (314) 751-6438
2. Contact Missouri AIDS Speakers Bureau to schedule a speaker. Please contact:

    Al Schon, coordinator
    Missouri AIDS Network
    St. Louis, MO 63132
    (314) 516-2724

3. Hold discussion on the possible psychosocial implications of the AIDS diagnosis for the client, the family, and the health care worker.

4. Have a class discussion on what the term "safe sex" means to students.

ANSWERS TO EVALUATION ITEMS:

1. c
2. f
3. g
4. a
5. b
6. e
7. b
8. a
9. T cell or T helper
10. c
11. d
12. c
13. c
14. a
15. Contact

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

Column I	Column II
____ 1. Immunity	a. A type of white blood cell important in the development of immunity
____ 2. Leukocytes	b. Acquired immunodeficiency syndrome
____ 3. OSHA	c. Resistance to a specific disease
____ 4. Lymphocytes	d. That acquired by producing one's own antibody
____ 5. AIDS	e. Show no signs or symptoms of infection
____ 6. Asymptomatic	f. White blood cells whose chief function is to protect the body against pathogenic organisms
	g. Signifies the occupational safety and health administration

7. Which one of the following is a true statement describing acquired immunodeficiency syndrome (AIDS): (Circle the letter of the best answer.)

   a. AIDS is a very old disease.
   b. AIDS is caused by a virus known as HIV.
   c. An HIV infected person always has symptoms.
   d. AIDS is not always a fatal disease.

8. The incubation period for AIDS is: (Circle the letter of the best answer.)

   a. Most people show antibodies to HIV in the blood stream three months after infection.
   b. Most people show antibodies to HIV in the blood stream immediately after infection.
   c. Most people do not show antibodies to HIV in the blood stream for 16 years.
   d. Most people do not show antibodies to HIV in the blood stream for 10 years.

9. The HIV retro virus attacks and cripples an important cell called the ______________________________.

10. Two diagnostic tests for AIDS are: (Circle the letter of the best answer.)

    a. EMMA and Southern Blot.
    b. ERMA and Eastern Blot.
    c. ELISA and Western Blot.
    d. Elizabeth and Midwest Blot.

11. Which of the following individuals have the highest risk of contacting AIDS? (Circle the letter of the best answer.)

    a. Individuals in a monogamous relationship
    b. Individuals who abstain from intercourse
    c. Individuals who care for AIDS clients
    d. Individuals who have sexual relations with many partners

12. Symptoms of AIDS include all of the following except: (Circle the letter of the best answer.)

    a. Weight loss greater than 10 pounds without dieting.
    b. Swollen lymph glands in the neck, underarms, and groin.
    c. Constipation and productive cough.
    d. Drenching night sweats and recurrent diarrhea.

13. Which one of the following is true concerning the treatment of AIDS: (Circle the letter of the best answer.)

    a. AIDS can be cured if treated early.
    b. Antibiotics will cure aids.
    c. There is no known cure for AIDS.
    d. Vitamins have been known to cure AIDS.

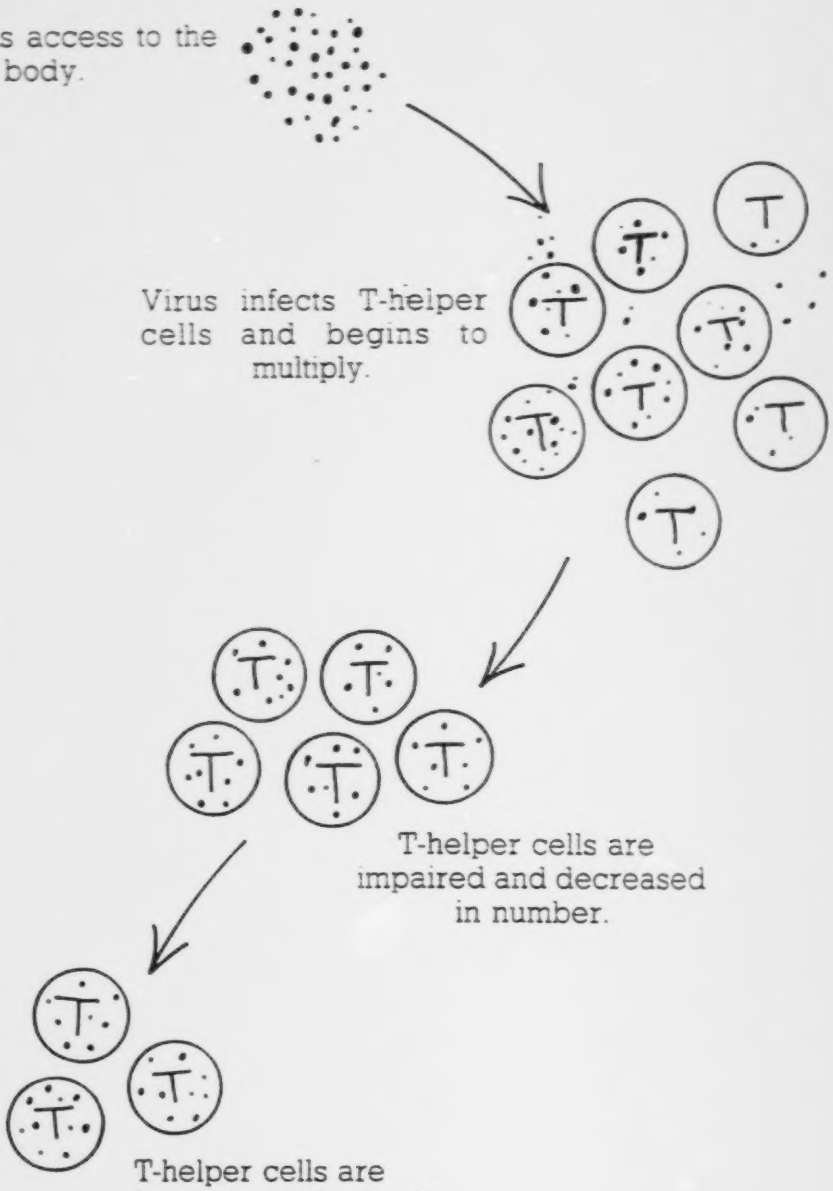
14. The AIDS virus is spread by: (Circle the letter of the best answer.)

    a. Vaginal fluid, blood, and semen.
    b. Shaking hands.
    c. Water fountains.
    d. Toilet seats.

15. A common misconception regarding the transmission of the AIDS virus is that it can be spread through casual ________________.

HO 1

HOW THE HIV INFECTION ATTACKS THE IMMUNE SYSTEM



HIV gains access to the body.

Virus infects T-helper cells and begins to multiply.

T-helper cells are impaired and decreased in number.

T-helper cells are reduced and body is more susceptible to all infections.

HO 2

AIDS CASES BY AGE*

AGE GROUP	MISSOURI		UNITED STATES	
	CASES	(%)	CASES	(%)
<13	41	0.70%	6611	1.39%
13-19	53	0.90%	2184	0.46%
20-29	1444	24.4%	87,293	18.3%
30-39	2678	45.3%	216,833	45.47%
40-49	1207	20.4%	115,769	24.28%
>49	489	8.3%	48,205	10.10%
TOTAL	5912	100.0%	476,895	100.0%

*NOTE: Reported cases through June 30, 1995

Credit: *HIV/AIDS Newsletter*. Missouri Department of Health, Bureau of AIDS Prevention, June 1995.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

SCOPE OF UNIT:

This unit covers an introduction to microorganisms, transmission of microorganisms, infection control, AIDS and hepatitis. It includes procedures for hand washing and donning and removing gloves, gowns, and masks.

INFORMATION TOPIC: IV-5 OR DEMONSTRATION:

HEPATITIS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Describe viral hepatitis.
2. List the types of hepatitis.
3. Identify how hepatitis is spread.
4. List the incubation period for hepatitis A, hepatitis B, and hepatitis C.
5. Describe the symptoms of hepatitis.
6. Describe the prognosis of hepatitis.
7. Identify measures to prevent hepatitis.
8. Describe treatment for hepatitis.
9. Describe employee rights if exposed to hepatitis.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Hepatitis A Fact Sheet
2. HO 2: Hepatitis B Fact Sheet
3. HO 3: Hepatitis C Fact Sheet

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 5 prior to class and be prepared to discuss the information presented.

REFERENCES:

Burhoe, Steven. *Bloodborne Pathogens, An Overview of OSHA's Standards.* University of Missouri-Columbia, Instructional Materials Laboratory, 1992.

Centers for Disease Control. *Perspectives in Disease Prevention and Health Promotion.* MMWR, 1988.

Hepatitis A Fact Sheet. Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

Hepatitis B Fact Sheet. Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

Hepatitis C Fact Sheet. Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

Hepatitis: Everything from A to E. Abbott Park, IL: Abbott Laboratories, 1993.

Infection Control Protocol for Student Clinical Experiences. University of Missouri-Columbia. Instructional Materials Laboratory, 1994.

Infection Prevention and Control Manual. University of California San Diego Medical Center, Epidemiology Unit, 1987.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Schere, Jeanne C. *Introductory Medical-Surgical Nursing.* 4th ed. Philadelphia: PA, J.B. Lippincott, 1992, Chapter 38.

INTRODUCTION:

Viral hepatitis is a highly contagious disease. As a health care assistant, you must understand the disease and the proper procedures to protect yourself and others while caring for a person with this condition. You will learn how to prevent the spread of the disease while assisting clients with the disease to maintain their self-image.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV: CONCEPTS OF MICROBIOLOGY

OUTLINE:

I. Viral Hepatitis **(II-1)**

   A. An infectious contagious disease of the liver caused by a virus. The liver cells may die.

   B. Damage to the liver may prevent normal bile secretions.

II. Types of Hepatitis **(II-2)**

   A. Hepatitis A - caused by the hepatitis A virus (HAV). Also known as infectious hepatitis or epidemic hepatitis.

   B. Hepatitis B - caused by the hepatitis B (HBV). Also known as serum hepatitis.

   C. Hepatitis C - a form of hepatitis not caused by the hepatitis A virus or hepatitis B virus; formerly known as "Non A, Non B" hepatitis.

   D. Hepatitis D - an infection that exists only in combination with hepatitis B virus

   E. Hepatitis E - an infection that is not caused by the hepatitis A virus or hepatitis B virus; formerly known as "epidemic" or "waterborne Non A, Non B" hepatitis.

III. Transmission **(II-3)**

   A. Hepatitis A - from person to person by contact with the virus in the:

      1. Feces and saliva of infected person

      2. Blood of the infected person

      3. Water

      4. Food contaminated with the virus from diseased food handlers, cooks, or waiters

      5. Contaminated rectal thermometers, bedpans, and linens

   B. Hepatitis B - found in all body fluids of infected persons

      1. Transfusions of blood or plasma

      2. Needles, syringes, and surgical or dental equipment

3. Intimate contact with carriers or those who have the disease. The virus is found in:

   a. Vaginal secretions

   b. Semen

   c. Saliva

   d. Urine

C. Hepatitis C (formerly called Non A, Non B)

   1. Transfusion of blood

   2. May be transferred through intimate contact with an infected person

D. Hepatitis D (cannot initiate an infection by itself)

   1. A person must have acquired hepatitis B before becoming infected with hepatitis D.

   2. It is spread in the same manner as hepatitis B.

E. Hepatitis E - acquired when a person ingests water or food contaminated with human feces.

IV. Incubation Period **(II-4)**

   A. Hepatitis A - 2 to 7 weeks

   B. Hepatitis B - 2 to 6 months

   C. Hepatitis C - 2 weeks to 6 months

V. Signs and symptoms - flu-like symptoms **(II-5)**

   A. Nausea and vomiting

   B. Low grade or high fever

   C. Malaise (a feeling of discomfort or uneasiness)

   D. Headache

   E. Right upper quadrant discomfort

   F. Enlargement of the spleen, liver, and lymph nodes

   G. Weight loss

H. Rash

I. Pruritus (itching)

J. Jaundice (yellow color of skin)

K. Clay-colored or light-colored stools

L. Dark-colored urine

M. Occasional joint pain

N. Extreme fatigue

O. Anorexia (loss of appetite)

VI. Prognosis (outcome of the disease) - Complete recovery from any form may take four months or longer. **(II-6)**

A. Hepatitis A

1. Often produces fever

2. The disease is generally resolved without long-term effects.

B. Hepatitis B

1. Fewer than 1 percent of people with hepatitis B will die; most experience complete recovery.

2. Those who recover will never be blood donors.

3. A few people will have chronic active hepatitis. Chronic liver disease may progress to liver cancer (5 - 10 percent).

C. Hepatitis C - Those infected have a 50 - 60 percent chance of developing lifelong disease.

D. Hepatitis D (in conjunction with hepatitis B)

1. The most severe known form of viral hepatitis

2. Generally progresses into chronic active disease or death

E. Hepatitis E

1. Is among the leading causes of acute viral hepatitis in the young to middle adults in developing countries

2. Has nearly a 20 percent mortality rate.

VII. Prevention of Hepatitis **(II-7)**

A. Follow the recommendations from the Centers for Disease Control and Prevention (CDC), and the American Hospital Association (AHA), and the Occupational Safety and Health Administration's (OSHA) standards for Body Substance Precautions. Refer to the *Infection Control Protocol for Student Clinical Experiences: A Protocol Document for Health Programs in Missouri* for all components of Body Substance Precautions.

1. Perform scrupulous hand washing consistently.

2. Wear gloves when handling mucous membranes, non-intact skin and/or any moist body substances (blood, urine, feces, wound drainage, oral secretions, sputum, vomitus, or items/surfaces soiled with these substances).

3. Use disposable needles and syringes.

B. Immune globulin (Gamma globulin) can be given before or after exposure to hepatitis A to reduce the risk of infection.

C. Immune globulin (HBIG) may also be considered for long-term prevention. This is the vaccine indicted for health care providers.

D. Screen blood donors to prevent contaminated blood from entering the blood bank.

E. Maintain safe water and food supplies.

VIII. Treatment **(II-8)**

A. There is no standard established drug or medical treatment.

1. The drug interferon has shown encouraging results with chronic cases of hepatitis B and hepatitis C.

2. Prevention is the best treatment.

B. During the acute phase, bed rest and inactivity are prescribed.

C. A high protein, high carbohydrate diet is recommended.

IX. Your Rights - Hepatitis B Exposure **(II-9)**

A. If you have occupational exposure to blood or potentially infectious materials in your position, your employer must make available the hepatitis B vaccine and vaccination series, and post-evaluation follow-up to all employees who have had an exposure incident. The vaccination and follow-up are to be at no cost to the employee, be performed by a licensed physician or licensed health professional within a reasonable time and place, and be provided according to the recommendations of the U.S. public health.

B. Within 10 working days after receiving training for a position with occupational exposure, your employer must make the vaccine series available at no cost to you. Only those who have previously had the series, are immune by antibody testing, or for those who the vaccine is contraindicated for medical reasons need not have the vaccine offered to them.

C. Participation in a prescreening program cannot be required by the employer as a prerequisite for receiving the HBV. Employees refusing the vaccine must sign a statement refusing to participate in the vaccination offer. They can reverse their decision later.

X. Summary and Conclusion

A. Viral hepatitis

B. Types of hepatitis

C. Transmission

D. Incubation period

E. Signs and symptoms

F. Prognosis

G. Prevention of Hepatitis

H. Treatment

I. Your rights - hepatitis B exposure

Hepatitis is a hazard to all health care providers. Immunization is highly recommended for all health care providers. The next unit is on anatomy and physiology.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV : CONCEPTS OF MICROBIOLOGY

INTERACTION ITEMS:

1. What is viral hepatitis?
2. How many types of hepatitis have been identified?
3. How is viral hepatitis transmitted?
4. What is the incubation period for hepatitis A, B, and C?
5. How many symptoms of hepatitis can you recall?
6. What is the prognosis of an individual who has hepatitis?
7. What measures prevent hepatitis?
8. Is there any treatment for hepatitis?
9. What are your rights as an employee if you are exposed to hepatitis?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have the class make a poster depicting what constitutes OSHA's Body Substance Precautions.
2. Melt a chocolate candy bar in a bedpan. Have students dispose of it as if it were feces from a client with hepatitis.

ANSWERS TO EVALUATION ITEMS:

1. Virus
2. Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D, Hepatitis E
3. a
4. a
5. b
6. c
7. a
8. a
9. d
10. a
11. b
12. b
13. d
14. a

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT IV: CONCEPTS OF MICROBIOLOGY

EVALUATION ITEMS:

1. Viral hepatitis is an infectious, contagious disease of the liver caused by a ____________________.

2. List the five types of hepatitis.

   a. ____________________

   b. ____________________

   c. ____________________

   d. ____________________

   e. ____________________

3. Which of the following is a true statement concerning the transmission of hepatitis? (Circle the letter which corresponds to the best answer.)

   a. Hepatitis A can be transmitted through water.
   b. Hepatitis A can be transmitted through all kinds of social contact.
   c. Hepatitis B can only be transmitted through blood transfusions.
   d. Hepatitis C can be transmitted through all kinds of social contact.

Match each type of hepatitis in Column I to the correct incubation period in Column II.

	Column I		Column II
4.	_____Hepatitis A	a.	2 to 7 weeks
5.	_____Hepatitis B	b.	2 to 6 months
6.	_____Hepatitis C	c.	2 weeks to 6 months

Circle the letter that corresponds to the best answer.

7. Individuals who recover from hepatitis can never:

   a. Donate blood.
   b. Be considered completely "cured."
   c. Expect to live out the normal life expectancy.
   d. Take medications that are detoxified by the liver.

8. Hepatitis can be prevented by:

   a. Scrupulous hand washing.
   b. Not having any social contact.
   c. Not using public bathrooms.
   d. Not eating in fast food restaurants.

9. Treatment for any type of hepatitis usually involves the following:

   a. Standardized drug regime, high protein and high carbohydrate diet
   b. Inactivity for 12 months and frequent aspirin intake
   c. Bed rest and inactivity during the acute phase, standardized drug regime
   d. Bed rest and inactivity during acute phase, high protein and high carbohydrate diet

10. Employee Rights regarding hepatitis include which of the following:

    a. Employers must offer the hepatitis vaccine at no cost to the employee.
    b. Employees must accept the vaccine or they can be terminated from the place of employment.
    c. Employees refusing the vaccine must sign a statement indicating their decline and the employee will be penalized.
    d. Employers must offer the hepatitis vaccine and deduct the cost from the employee's paycheck.

11. Symptoms of hepatitis include:

    a. Nausea/vomiting, headache, blindness
    b. Nausea/vomiting, headache, jaundice
    c. Nausea/vomiting, headache, earache
    d. Nausea/vomiting, headache, dark colored stools

12. Depending upon the type of hepatitis contracted, which of the following is true?

    a. Hepatitis A usually ends in death.
    b. Hepatitis B usually ends in complete recovery.
    c. Hepatitis C is resolved with only 1% chance of developing lifelong disease.
    d. Hepatitis D usually ends without active symptoms.

13. Hepatitis B virus is present in:

    a. Synovial fluid
    b. Ear wax
    c. Tears
    d. Vaginal secretions

14. The virus that is responsible for hepatitis can be contacted by all of the following ways EXCEPT:

    a. Airborne transmission
    b. Water
    c. Blood of infected persons
    d. Food

HEPATITIS A FACT SHEET

What is hepatitis A?

Hepatitis A (formerly known as infectious hepatitis) is a liver disease caused by the hepatitis A virus. The disease is fairly common; 619 cases were reported in Missouri in 1994.

Who gets hepatitis A?

Anyone can get hepatitis A, but it occurs more frequently in children. Another group of special concern is young adults from 15 to 30 years of age. This concern is two-fold. People in this age group tend to be more socially active, participating in activities that may involve sharing food, beverages or other substances. Also, they are frequently employed in occupations such as food preparation and service, which could provide the opportunity to expose large numbers of other people.

How is the virus spread?

The hepatitis A virus enters through the mouth, multiplies in the body and is passed in the feces. The virus can then be carried on an infected person's hands and can be spread by direct contact, or by eating or drinking food or beverages that were handled by the infected individual. In some cases, it can be spread by drinking water contaminated with improperly treated sewage. It cannot be spread by sneezing or coughing. An increasing number of hepatitis A cases have been reported in drug users, and it is suspected that contaminated drugs or close personal contact is the cause. The ritual sharing between users of both injectable and inhaled drugs provides an ideal method for the transmission of the virus.

What are the symptoms of hepatitis A?

The symptoms of hepatitis A may include fatigue, poor appetite, fever, and vomiting. Urine may become darker in color, and then jaundice (a yellowing of the skin and/or whites of the eyes) may appear. Very few deaths are caused by hepatitis A. Most people recover in a few weeks without any complications. Infants and young children tend to have very mild symptoms and are less likely to develop jaundice than are older children and adults. Not everyone who is infected will have all of the symptoms.

How soon do symptoms appear?

The symptoms may appear two or seven weeks after exposure, but usually four to five weeks.

How is it diagnosed?

Since there are several types of viral hepatitis, a blood test is needed to determine which type of hepatitis is present.

For how long is an infected person able to spread the virus?

The contagious period begins approximately two weeks before the symptoms appear, and ends one week after jaundice appears. If jaundice is not present, the person should be considered infectious for the two weeks before the symptoms started until two weeks after the start of symptoms (4 weeks total).

Does past infection with hepatitis A make a person immune?

Once an individual recovers from hepatitis A, he or she is immune for life and does not continue to carry the virus.

What is the treatment for hepatitis A?

There are no special medicines or antibiotics that can be used to treat a person once the symptoms appear. Generally, rest and good nutrition are all that is needed. Drugs and alcohol should be avoided.

How can hepatitis A be prevented?

A vaccine for hepatitis A has recently been licensed in the United States. However, it is still unavailable from the Missouri State Health Department. The best way to prevent spread is careful hand washing after using the toilet or changing diapers. Also, infected people should not handle foods during the contagious period. Household members, sex partners, drug partners, or others in close contact with an infected person should call a doctor or the health department to get a shot of immune globulin. This may prevent the exposed person from getting hepatitis A. Immune globulin must be given within two weeks of exposure to be effective.

Credit: Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

HEPATITIS B FACT SHEET

What is hepatitis B?

Hepatitis B (formerly known as serum hepatitis) is a liver disease caused by a virus. The disease is fairly common; more than 500 cases were reported in Missouri in 1991.

Who gets hepatitis B?

Anyone can get hepatitis B, but those at greatest risk include:

- babies born to mothers who are infected with the hepatitis B virus (including carriers);
- drug abusers who share needles;
- persons in occupations where there is contact with infected blood and body fluids;
- sexually active homosexual and bisexual men;
- sexually active heterosexual men and women (sexual activity with more than one partner in the previous 6 months);
- men and women who have a recent diagnosis of another sexually transmitted disease;
- people in custodial care (in settings such as centers for the developmentally disabled);
- hemodialysis patients;
- persons who receive unscreened blood products;
- certain household contacts of an infected person;
- household contacts and sexual partners of hepatitis B carriers;
- inmates of long-term correctional facilities;
- persons from countries where hepatitis B is widespread (certain areas of Asia and Africa);
- persons in the United States who are Alaskan Natives or Pacific Islanders.

How is the virus spread?

Hepatitis B virus can be found in the blood of infected persons; it is also present in lesser amounts in saliva, semen, and other body fluids. Although saliva can contain small amounts of the hepatitis B virus, it is not usually spread in this way. It is spread by direct contact with infected body fluids, usually by needle sharing, needle stick injury, or sexual contact. Hepatitis B virus is not spread by casual contact.

What are the symptoms of hepatitis B?

Some people have loss of appetite, tiredness, fever, vomiting and occasionally joint pain, hives, or rash. Urine may become darker in color, and then jaundice (a yellowing of the skin and whites of the eyes) may appear. Some people have no symptoms or only a few symptoms.

How soon do symptoms appear?

The symptoms appear two to six months after exposure, but usually within three months.

How is hepatitis B diagnosed?

Since there are several types of viral hepatitis, a blood test is needed to determine which type of hepatitis is present.

For how long is a person able to spread the virus?

The virus can be found in blood and other body fluids several weeks before symptoms appear and generally for several months afterward. About 1 in 10 people with hepatitis B will go on to become carriers of the virus; they can continue to spread the virus even if they do not have symptoms.

What is the treatment for hepatitis B?

There are no special medicines or antibiotics that can be used to treat a person once the symptoms appear. Generally, rest and supportive treatment are all that is needed. Carriers who have chronic hepatitis B infection may benefit from treatment with a medication called interferon alfa-2b.

What precautions should hepatitis B carriers take?

Hepatitis B carriers should practice good hygiene so that close contacts are not directly exposed to their blood or other body fluids. Carriers must not share razors, toothbrushes, or any other object that may become contaminated with blood. In addition, household members, particularly sexual partners, should be immunized with hepatitis B vaccine. Carriers should practice "safer sex" if their partners are not immunized. It is important for carriers to inform their dentists and other health care providers of their carrier state.

How can hepatitis B be prevented?

A vaccine to prevent hepatitis B has been available for several years. It is safe, effective and is recommended for all newborns and for people at high-risk who have not already been infected (see previous page 1, "Who gets hepatitis B?"). A special hepatitis B immune globulin (HBIG) is also available for people who are exposed to the virus. If you are exposed to hepatitis B, consult a doctor or your local health department.

Credit: Missouri Department of Health, P.O. Box 570, Jefferson City, MO 65102.

HEPATITIS C FACT SHEET

What is hepatitis C?

Hepatitis C is the form of viral hepatitis which was once known as transfusion hepatitis. About 150,00 to 170,00 new cases of hepatitis C occur each year in the United States.

Who gets hepatitis C?

Hepatitis C occurs most often in people who have received a blood transfusion, are on hemodialysis, have shared needles during drug use, or are health care workers exposed to infected blood. However, many people who have hepatitis C have not had any of these exposures.

How is the virus spread?

The hepatitis C virus is spread much in the same way that hepatitis B is spread, through blood and body fluids of an infected person. For this reason, it is seen in people who have received a blood transfusion, have shared needles during drug use, or have jobs which frequently expose them to blood. Hepatitis C may also be spread through sexual contact. Hepatitis C is hardly ever passed from a pregnant woman to her unborn child.

What are the symptoms?

Some people have loss of appetite, tiredness, nausea and vomiting, vague stomach pain, and jaundice (a yellowing of the skin and whites of the eyes). Some people do not have any symptoms.

How soon do symptoms occur?

Symptoms may occur from two weeks to six months after exposure, but usually within 6-9 weeks.

When and for how long is a person able to spread hepatitis C?

A person with hepatitis C is contagious from one or two weeks before symptoms appear and during the entire time the person is ill. About 50% of the people with hepatitis C will go on to become chronic carriers. Until more is learned about this disease, all persons who have been diagnosed as having hepatitis C should be considered infectious (able to pass the hepatitis C virus through their blood and body fluids).

What is the treatment for hepatitis C?

There are no special medications or antibiotics that can be used to treat people with hepatitis C. They should get plenty of rest, eat small, frequent meals, and avoid drinking alcoholic beverages and using drugs.

Is donated blood tested for this virus?

In 1990, a screening test was licensed to test blood donated for transfusions. The number of hepatitis C cases caused by blood transfusions has dropped considerably since using this test.

How is hepatitis C diagnosed?

At the present time, there is no test available which will detect hepatitis C early in the illness. A physician must examine the patient and run liver function tests to eliminate hepatitis A and B as the cause of illness.

There is a test which can tell if someone is a chronic carrier or has had hepatitis C in the past. (It is the same test used to screen donated blood). The test looks for antibodies in the blood; these antibodies do not usually show up in the blood until about 4 months after the person becomes ill.

How can the spread of hepatitis C be prevented?

People who have had hepatitis C should be aware that their blood, and possibly other body fluids, may be infective. Care should be taken to avoid blood exposure to others; do not share toothbrushes, razors and needles. In addition, infected people must not donate blood and should inform their dental or medical care providers so that proper precautions can be followed. Cuts and breaks in the skin should be covered to prevent the spread of blood and infectious drainage.

People with hepatitis C who have one steady sex partner do not need to change their sexual practices. However, people with hepatitis C who have more than one sex partner, or who take a new sexual partner, should tell their sex partners they have the disease. They should also protect their partners during sexual activity and prevent then from coming into contact with the infected person's blood, semen, urine, stool, saliva, vaginal secretions, and mucous membranes. Proper use of latex condoms may lessen the risk of infecting a sex partner.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-1 OR DEMONSTRATION:

THE BODY AS A WHOLE
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Describe anatomical position.
2. Identify body planes on a diagram.
3. Match directional terms to correct definitions.
4. Apply correct directional terms related to body parts.
5. List the two major body cavities, the subdivision in each, and the major organs in each.
6. Identify regions of the abdomen.
7. Identify quadrants of the abdomen.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Anatomical Position
2. HO 2: Body Planes
3. HO 3: Directional Terms
4. HO 4: Body Cavities
5. HO 5: Regions of the Abdomen

6. HO 6: Quadrants of the Abdomen

7. Wall charts of human body

8. Anatomical model (entire body) - standard tool

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 1 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Ester G. Skelley. *Body Structure and Function*, 7th ed. Albany, NY: Delmar Publishers, 1989.

Anthony, Catherine; Gary Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Times Mirro/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

In this lesson we will study directional terms and body regions used frequently in the health care field to describe the position of one body part in relation to another.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Anatomical Position (HO 1) - Used to describe the human body when standing. Body is erect, face forward with arms at sides and palms turned forward. **(II-1)**

II. Body Planes (HO 2) **(II-2)**

  A. Frontal - divides body into front and back

  B. Sagittal - divides body into right and left sides; the sagittal plane that divides the body equally into right and left sides is the midsagittal plane

  C. Transverse - divides body into top and bottom

III. Directional Terms (HO 3) **(II-3)**

  A. Anterior (ventral) - the front or in "front of"

  B. Caudal - the tail end of the body

  C. Cranial - the head end of the body

  D. Distal - farther away from a point of reference, usually the trunk or middle of the body

  E. Inferior - away from the head end or toward the lower part of body

  F. Lateral - toward the side of body or away from midline

  G. Medial - closer to the midline of the body

  H. Posterior (dorsal) - the back side of the body

  I. Proximal - nearer a point of reference, usually the trunk or middle of the body

  J. Superior - toward the head end or the upper part of body

IV. Body Cavities (HO 4) **(II-4)**

  A. Dorsal (posterior) - refers to the back **(II-5)**

    1. Cranial - contains brain

    2. Spinal - contains spinal cord

B. Ventral (Anterior) - refers to the front **(II-6, 7, 8)**

   1. Thoracic - contains lungs, heart
   2. Abdominal - contains stomach, intestines
   3. Pelvic - contains bladder and some reproductive organs

V. Regions of the Abdomen (HO 5) **(II-9)**

   A. Right hypochondriac
   B. Left hypochondriac
   C. Epigastric
   D. Umbilical
   E. Right lumbar
   F. Left lumbar
   G. Right iliac
   H. Left iliac
   I. Hypogastric

VI. Quadrants of the Abdomen (HO 6) **(II-10)**

   A. Right upper quadrant
   B. Right lower quadrant
   C. Left upper quadrant
   D. Left lower quadrant

VII. Summary and Conclusion

   A. Anatomical position
   B. Body planes
   C. Directional terms
   D. Body cavities
   E. Regions of the abdomen
   F. Quadrants of the abdomen

In the next lesson, we will look at the organization of the body beginning with the single cell. Be sure to study the handout and read the informational assignment beforehand.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What is the anatomical position?
2. Where are the sagittal, frontal, and transverse body planes located?
3. How are the directional terms defined in relation to the human body?
4. What are the two main body cavities?
5. What organs are contained in the dorsal cavity?
6. What is the name of the body cavity that most people think of as their chest?
7. What body cavity contains the stomach and intestines?
8. What body cavity contains the bladder and reproductive organs?
9. What are the nine regions of the abdomen?
10. Where are the four (4) quadrants of the abdomen located?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Discuss the handouts included with this lesson and in conjunction with the classroom anatomical model.
2. Have students describe parts of their bodies using directional terms.

ANSWERS TO EVALUATION ITEMS:

1. Anatomical
2. g
3. a
4. d
5. c
6. b
7. h
8. e
9. f
10. Inferior
11. Superior

12. Ventral
13. Medial
14. Lateral
15. Transverse
16. Sagittal
17. Frontal

18. a. Dorsal
    1. Cranial
    2. Spinal

    b. Ventral
    1. Thoracic
    2. Abdominal
    3. Pelvic

19. a. Right hypochondriac
    b. Epigastric
    c. Left hypochondriac
    d. Right lumbar
    e. Umbilical
    f. Left lumbar
    g. Right iliac
    h. Hypogastric
    i. Left iliac

20. a. Right upper quadrant
    b. Left upper quadrant
    c. Right lower quadrant
    d. Left lower quadrant

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

1. ____________ position is a term used to describe the body when erect with the arms at the sides, face forward and palms turned upward.

Match the following directional terms in Column II to the correct definitions in Column I.

Column I

___ 2. Toward the head end or the upper part of body

___ 3. Toward the side of body or away from midline

___ 4. Farther away from a point of reference

___ 5. Closer to the midline of the body

___ 6. Nearer a point of reference, usually the trunk or middle of the body

___ 7. The back side of the body

___ 8. The front or "belly side" of the body

___ 9. Away from the head or toward the lower part of the body

Column II

a. Lateral
b. Proximal
c. Medial
d. Distal
e. Anterior
f. Inferior
g. Superior
h. Posterior

Fill in the blank with the correct directional term.

10. The ankle is ____________ to the thigh.

11. The thigh is ____________ to the ankle.

12. The knee cap is anterior or ______________.

13. The little finger is ____________ to the trunk.

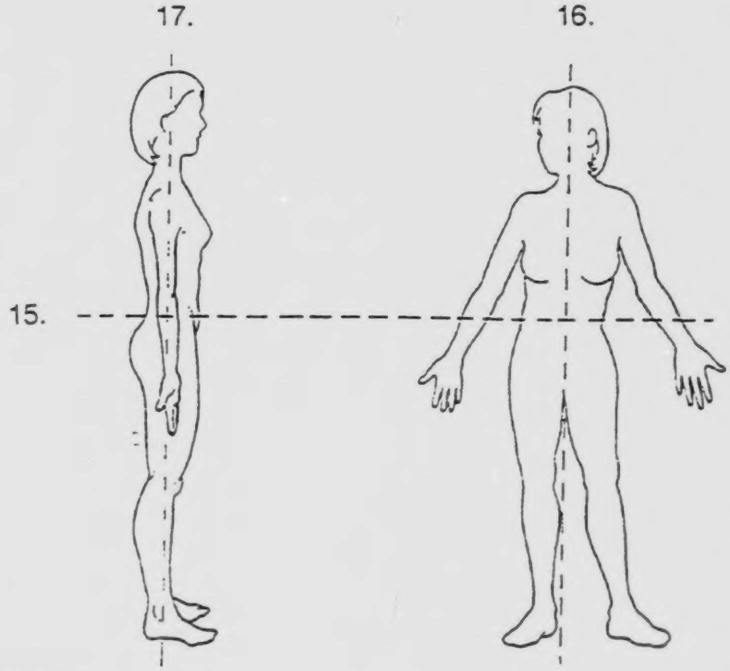
14. The thumb is ______________ to the trunk.

Identify body planes on the following diagram.

15.______________________________

16.______________________________

17.______________________________



18. List the body cavities and their subdivisions.

a.______________________________

1.______________________________

2.______________________________

b.______________________________

1.______________________________

2.______________________________

3.______________________________

19. Name the regions of the abdomen shown on the diagram

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

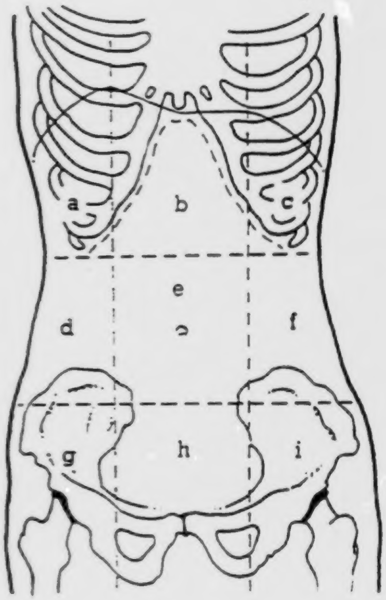
e. ______________________________

f. ______________________________

g. ______________________________

h. ______________________________

i. ______________________________



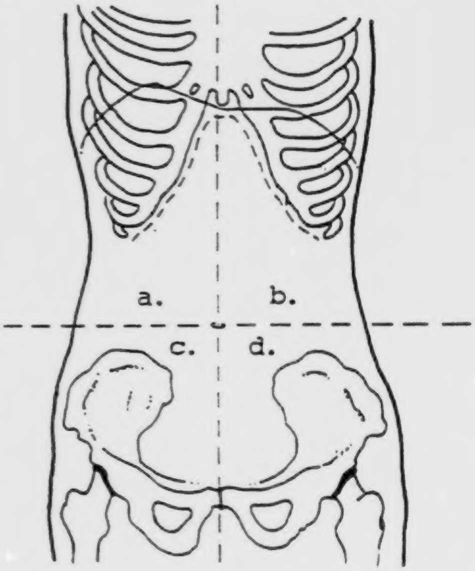
20. Name the quadrants of the abdomen shown on the diagram.

a. ______________________________

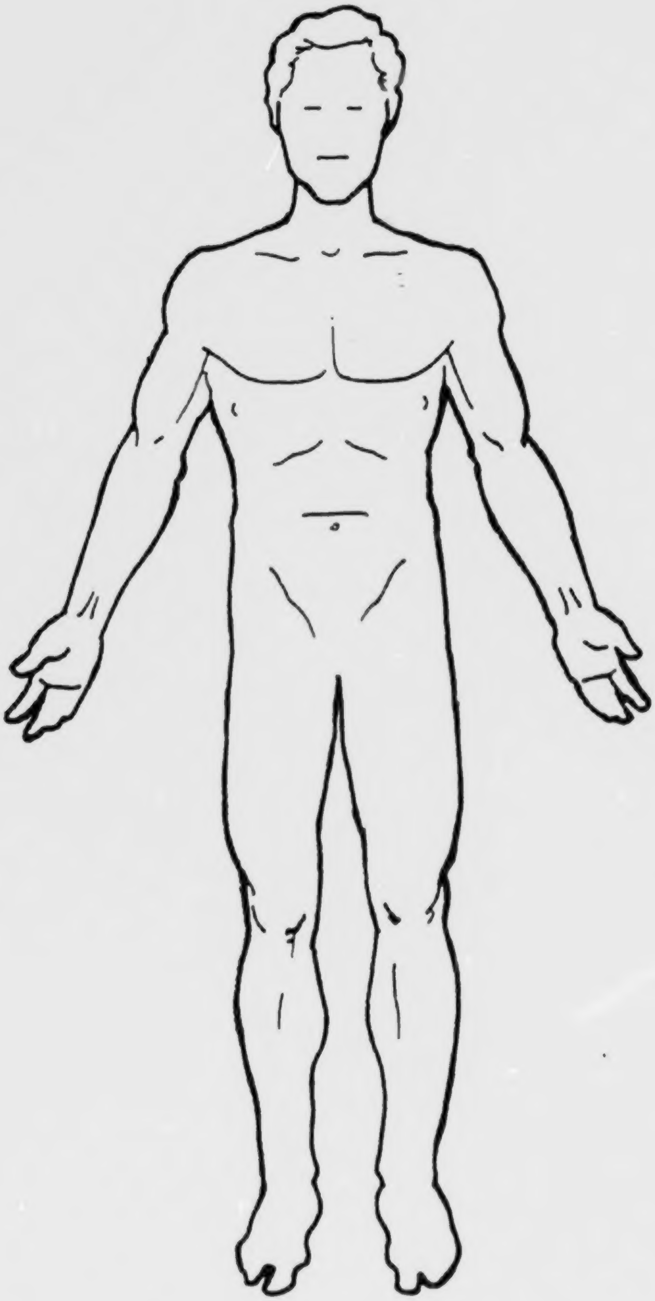
b. ______________________________

c. ______________________________

d. ______________________________

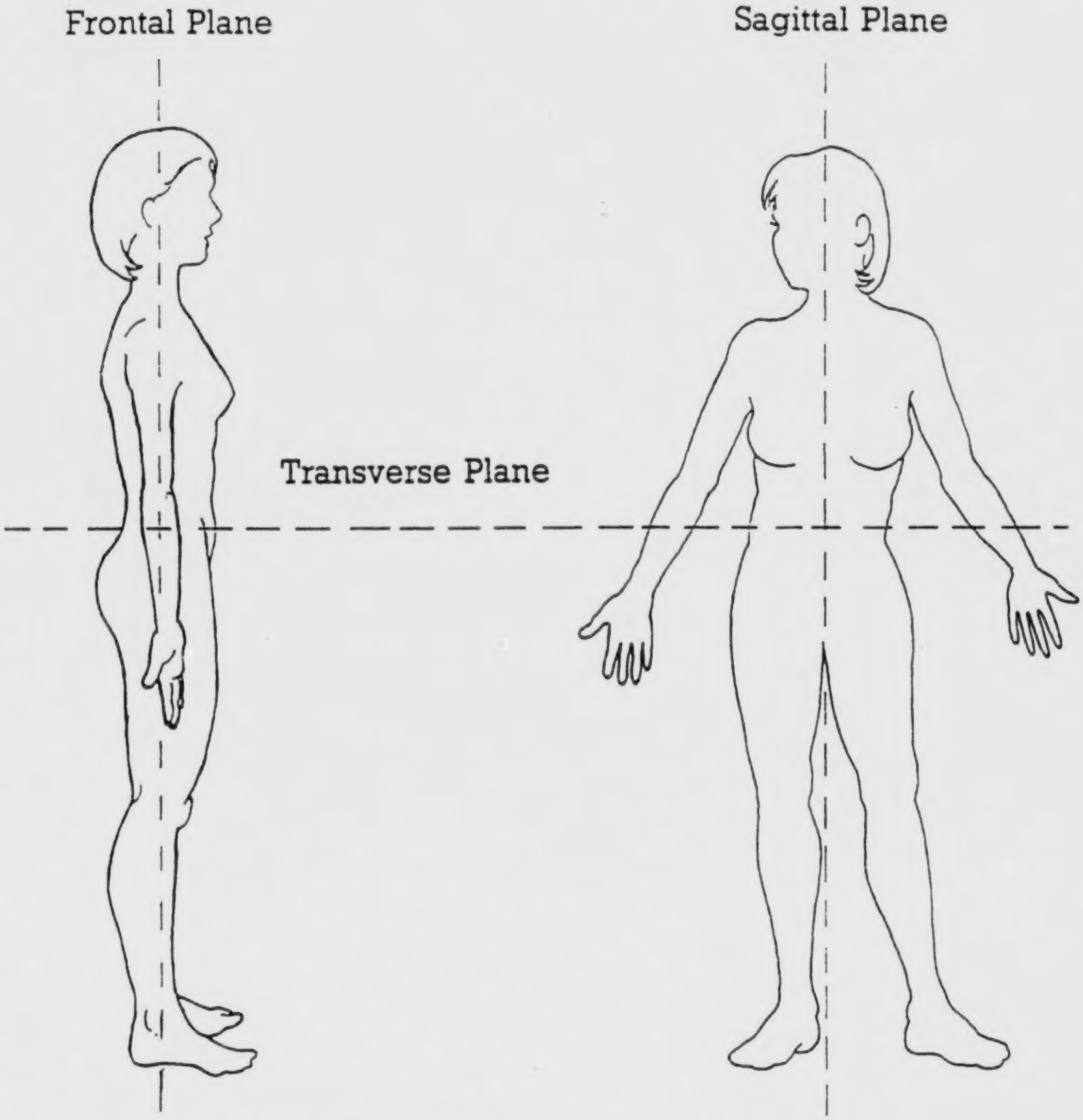


ANATOMICAL POSITION



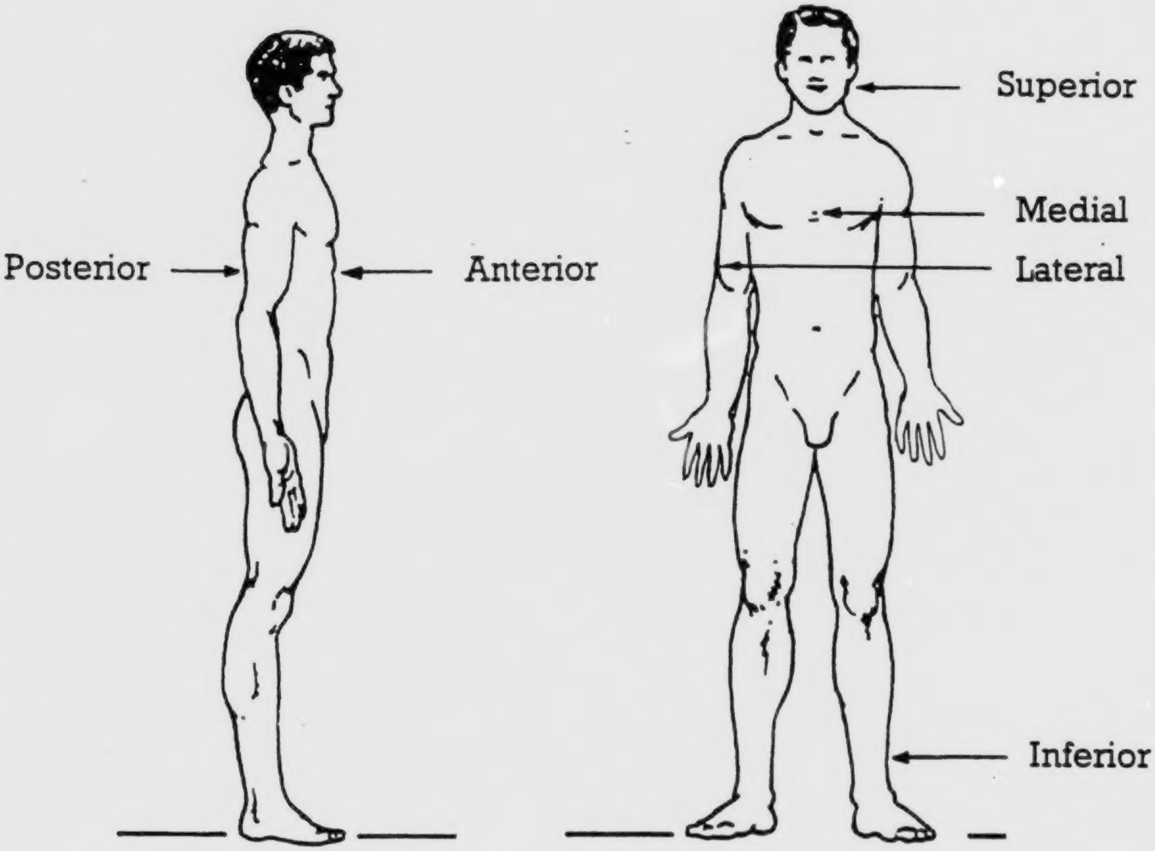
Anatomy and Physiology, page 5.13

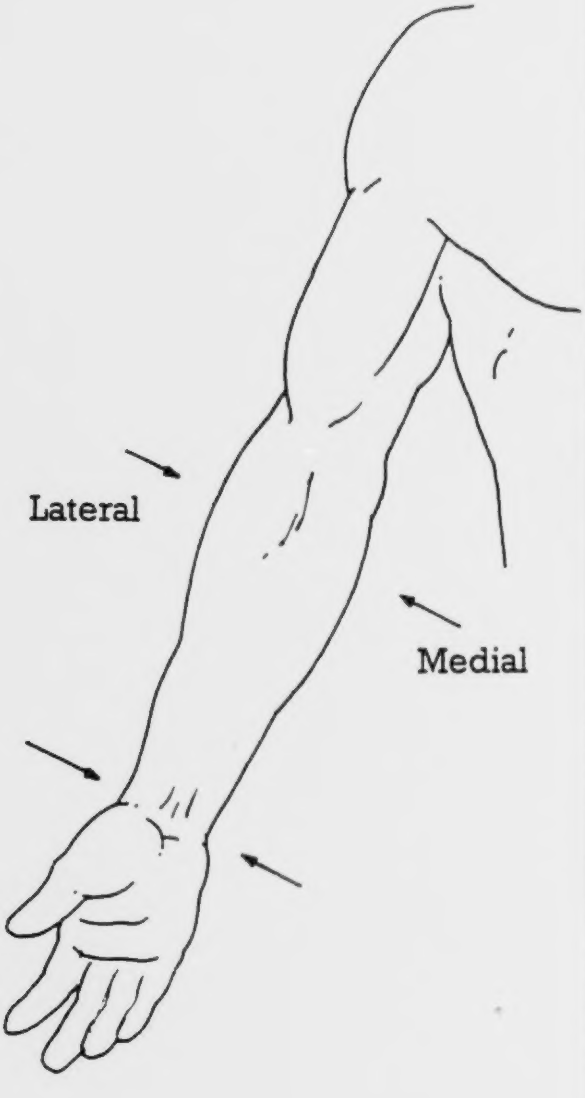
BODY PLANES

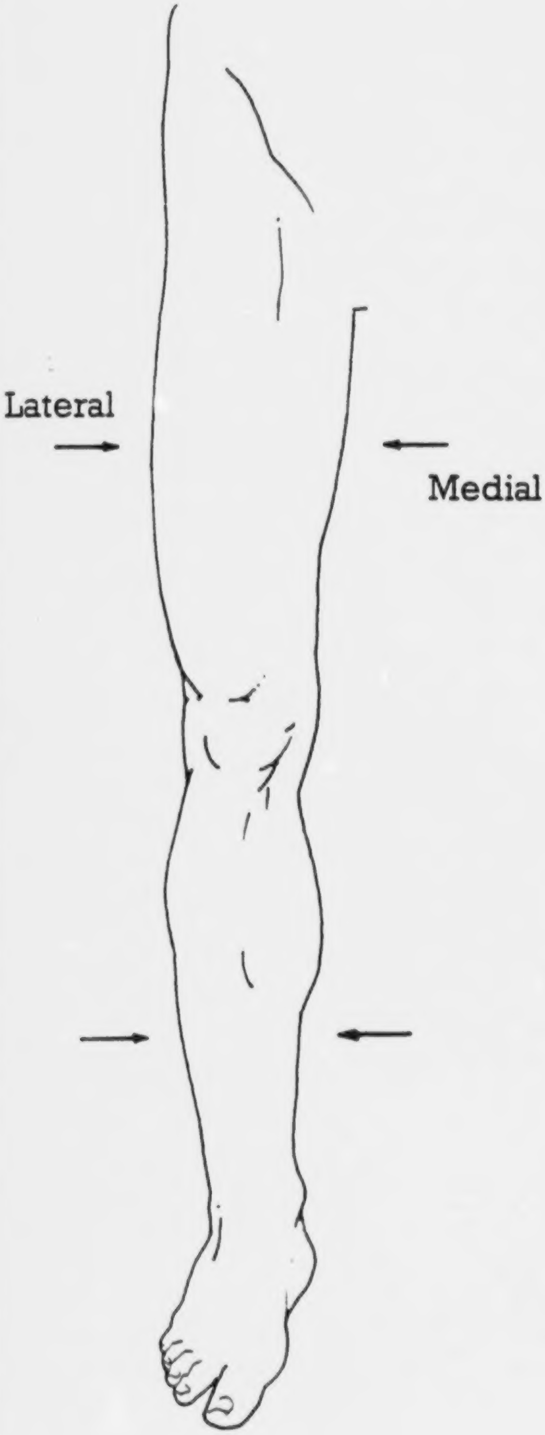

Frontal Plane
Sagittal Plane
Transverse Plane

HO 3

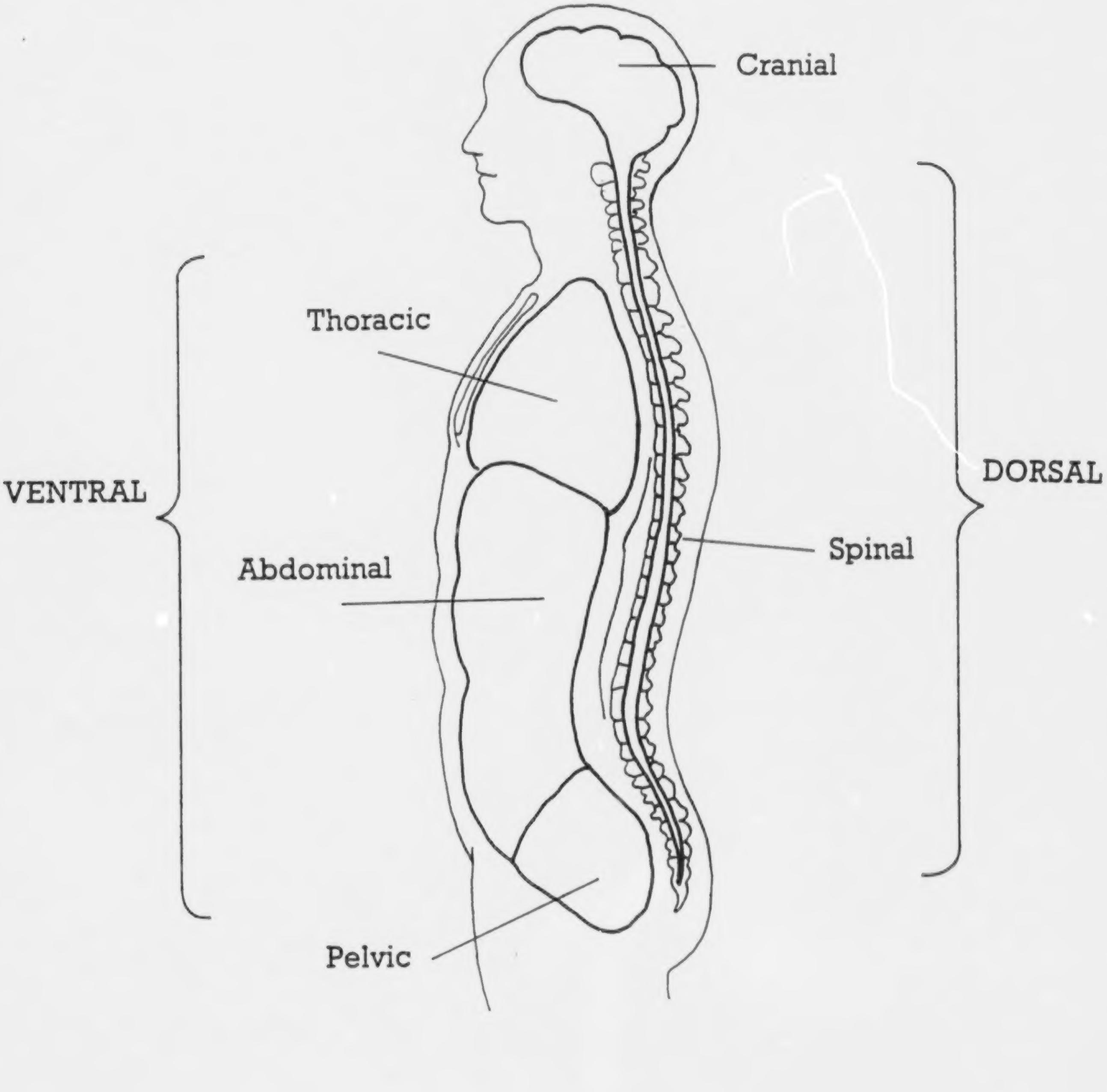
DIRECTIONAL TERMS


Posterior
Anterior
Superior
Medial
Lateral
Inferior

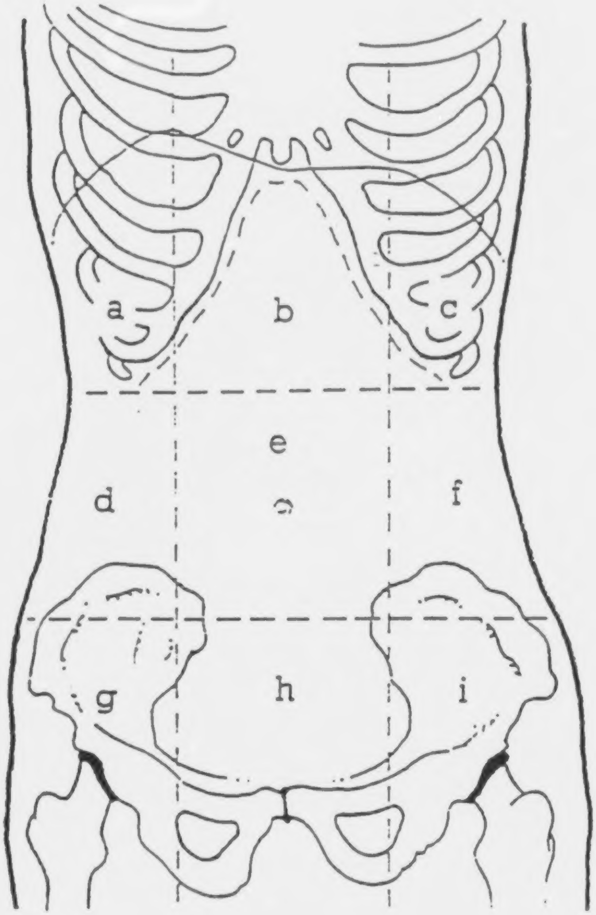

Lateral
Medial


Lateral
Medial

BODY CAVITIES

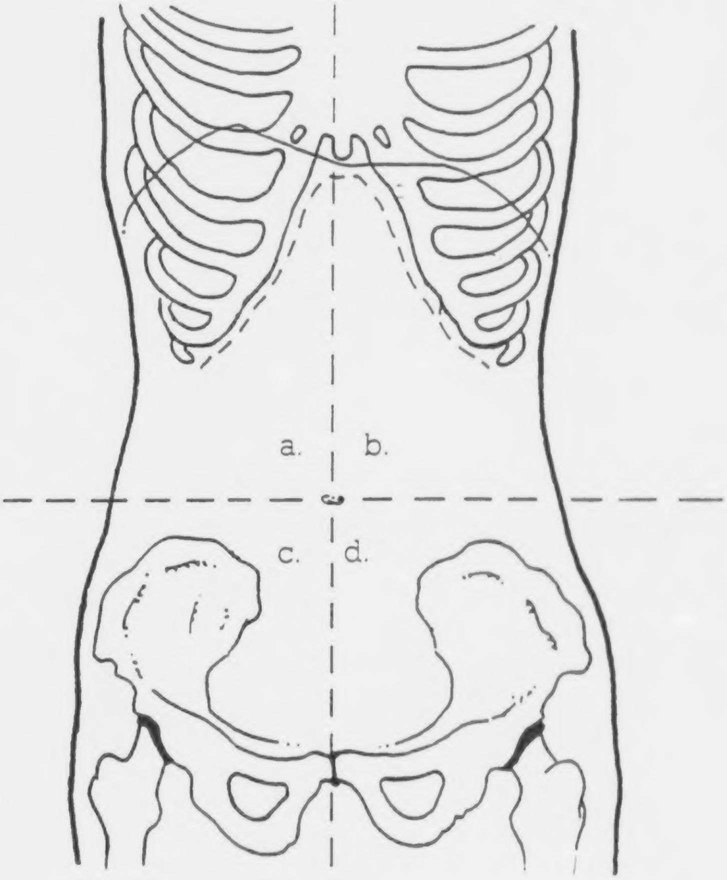

Cranial
Thoracic
VENTRAL
Abdominal
Pelvic
DORSAL
Spinal

REGIONS OF THE ABDOMEN



a. Right Hypochondriac	f. Left Lumbar
b. Epigastric	g. Right Iliac
c. Left Hypochondriac	h. Hypogastric
d. Right Lumbar	i. Left Iliac
e. Umbilical	

QUADRANTS OF THE ABDOMEN



a. Right Upper Quadrant
b. Left Upper Quadrant
c. Right Lower Quadrant
d. Left Lower Quadrant

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-2 OR DEMONSTRATION:

ORGANIZATION OF THE BODY
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with their correct definitions.
2. List five functions of a cell.
3. Label parts of a cell.
4. List four basic types of body tissues.
5. Match the four types of body membranes with their functions.
6. Describe an organ.
7. Describe a body system.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: The Cell

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 2 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Ester G. Skelley. *Body Structure and Function*, 7th ed. Albany, NY: Delmar Publishers, 1989.

Anthony, Catherine; Gary Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Times Mirro/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

As we begin our study of the structure and function of the human body we become aware of its marvelous workings and learn to appreciate our bodies. It is necessary to be familiar with the normal body in order to recognize deviations.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Anatomy - the study of the shape and structure of the body

   B. Angiology - study of the circulatory system

   C. Arthrology - study of joints

   D. Biology - the study of all forms of life

   E. Cytology - the study of cells, their origin, structure, and functions

   F. Dermatology - study of skin, hair, and nails

   G. Diffusion - movement of particles through a cell membrane, either in or out, when their concentration is greater on one side of the membrane than on the other

   H. Endocrinology - study of the endocrine (hormonal) system

   I. Enzymes - proteins which act as chemical catalysts in living organisms

   J. Filtration - movement of particles in solution from a place of higher hydrostatic pressure to a place of lower hydrostatic pressure

   K. Histocyte - a tissue cell

   L. Histology - the study of tissue

   M. Homeostasis - a state of chemical balance between a cell and its environment

   N. Hydrostatic pressure - pressure exerted by a liquid within a closed system

   O. Metabolism - sum total of chemical reactions that occur in a living organism

   P. Myology - study of the muscular system

   Q. Neurology - study of the nervous system

   R. Osmosis - movement of solvent molecules through a semipermeable membrane from region of higher water concentration to lower concentration

   S. Osteology - study of the skeletal system

T. **Physiology** - study of the functions of the body parts and how they function to form a complete living organism

U. **Protoplasm** - living substance of all cells; composition is 70% water, calcium, phosphorus, etc. Characteristics include irritability, motility, metabolism, growth, and reproduction.

- a. Cytoplasm - the protoplasm of the cell surrounding the nucleus
- b. Nucleoplasm - the protoplasm of the nucleus of a cell

II. Cells (HO 1) **(II-2)**

A. Description

1. Microscopic in size
2. The basic unit of structure and function of all living things
3. Come in a variety of sizes and shapes

B. Structure

1. Cell membrane
    - a. The cell membrane surrounds each cell.
    - b. It separates the cell's cytoplasm from its external environment and from the neighboring cells.
    - c. It is a "selective semi-permeable membrane"; it allows certain substances to move through it but prevents other substances from passing through it.
    - d. The membrane is made up of lipid (fatty substance) and protein.
2. Cytoplasm
    - a. The cytoplasm is a sticky semi-fluid material found between the nucleus and the cell membrane.
    - b. Organelles are located in the cytoplasm. They are cell structures which help the cell to function. Organelles consist of the nucleus, mitochondria, ribosomes, golgi apparatus, endoplasmic reticulum, and lysosomes.

3. Nucleus

    a. Most important organelle

    b. Located in or near the center of the cell

    c. Controls the activities of cells and cell division (reproduction)

    d. The nucleus of each species contains a specific number of chromosomes. Human beings have 46 chromosomes (23 pairs). Chromosomes store hereditary material that is passed on from one generation to the next.

4. The nuclear membrane

    a. The nuclear membrane is a double layered membrane that has openings at regular intervals.

    b. Material can pass from the nucleus to the cytoplasm or from the cytoplasm to the nucleus through these openings.

5. Mitochondria

    a. An organelle the provides all of a cell's energy

    b. Vary in shape and size; can be a single or as many as a thousand in each cell

C. Function **(II-3)**

1. Metabolism - sum total of chemical reactions that occur in a living organism

2. Respiration - exchange of gases (CO_2 and O_2)

3. Nutrition - nourishment

4. Excretion - eliminating of waste products

5. Reproduction (mitosis) - reproduce self; increase total amount of protoplasm

6. Irritability - responds to a change in environment

7. Conductivity - transmission of nerve impulses

8. Contractility - the ability to contract or shorten

III. Tissues

A. Epithelial **(II-4)**

1. Simple squamous
    - a. Lines alveoli of lungs and blood and lymphatic vessels
    - b. Function - absorption, filtration, and osmosis
2. Stratified squamous
    - a. Surface of the skin (epidermis) and surface of the lining of the mouth and esophagus
    - b. Function - protection
3. Simple columnar
    - a. Surface layer of lining in the intestines, stomach, and part of the respiratory tract
    - b. Function - secretion, absorption and protection

B. Connective

1. Areolar
    - a. Located between organs and other tissue
    - b. Function - connects
2. Adipose (fat)
    - a. Serves as padding for various parts of the body and located under the skin
    - b. Function - protects, insulation, support, reserve of food
3. Dense fibrous
    - a. Tendons, ligaments, and scars
    - b. Function - connective
4. Bone
    - a. Skeleton
    - b. Function - protect and support
5. Cartilage
    - a. External ear, part of the nasal septum, disks between vertebrae, articular surface of bones, rings of trachea, larynx

        - b. Function - flexible support

    - C. Muscle
        - 1. Skeletal
            - a. Muscles that attach to bones, eye ball muscle, upper third of esophagus
            - b. Function - movement of bones, eye movement, first part of swallowing
        - 2. Cardiac
            - a. Wall of heart
            - b. Function - contraction of heart
        - 3. Visceral
            - a. In the wall of the digestive, respiratory, and genitourinary tracts; walls of blood and lymphatic vessels, ducts of glands, eye muscles, arrector muscles of hair
            - b. Function - movement of substance along tracts, change in diameter of blood vessels, pupils and shape of the lens of the eye, erection of hairs (goose bumps)
    - D. Nerve
        - 1. Brain, spinal cord, nerves
        - 2. Receives stimuli and conducts impulses to and from all body parts

- IV. Membranes - thin, soft sheets of tissue that line a tube or cavity, that cover organs or structures, or that separate one part from another **(II-5)**
    - A. Mucous
        - 1. Lines body cavities that open to outside **(II-6)**
        - 2. Secretes mucus
    - B. Serous
        - 1. Lines body cavities that do not open to the outside
        - 2. Secretes serous fluid
        - 3. Prevents friction
    - C. Cutaneous - covers body, skin

- D. Synovial
    1. Acts as a cushion
    2. Lines joint cavities
    3. Secretes synovial fluid

V. Organs **(II-7, 8)**

- A. A group of similar tissues performing the same function
- B. Examples - heart, lung, stomach, etc.

VI. Systems **(II-9)**

- A. A group of organs performing the same function
- B. Example - circulatory, digestive, urinary, endocrine, reproductive systems, etc.

VII. Summary and Conclusion

- A. Terms and definitions
- B. Cells
- C. Tissues
- D. Membranes
- E. Organs
- F. Systems

It is amazing how each cell can function independently or in concert with other cells to form body systems which provide for our existence. The next unit will be on the skin and its appendages.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What is the definition of anatomy, physiology, biology, arthrology, neurology, osmosis, filtration, protoplasm, enzymes, homeostasis, diffusion, metabolism, and cytology?
2. Where on Handout 1 are the following located: cell membrane, cytoplasm, nucleus, and mitochondrion?
3. What are the functions of a cell?
4. What are the four types of body tissues?
5. What are four types of body membranes?
6. What are the functions of mucous, serous, cutaneous, and synovial membranes?
7. What is an organ?
8. How many examples of an organ can you name?
9. What is a body system?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Examine prepared microscope slides of various types of tissues.
2. Divide class into small groups and discuss why knowledge of body organization is important to:
    a. Laboratory technician
    b. Physician
    c. Physical therapist
    d. Nurse
    e. Other health occupations
3. Explain and show the different organs of the anatomical model.
4. Have students look up the function of ribosomes, golgi apparatus, endoplasmic reticulum, and lysosomes.

ANSWERS TO EVALUATION ITEMS:

1. e
2. f
3. b
4. a
5. c
6. a
7. b
8. c
9. d
10. e
11. f
12. g
13. h
14. (Any five of the following:)
    a. Metabolism
    b. Respiration
    c. Nutrition
    d. Excretion
    e. Reproduction
    f. Conductivity
    g. Contractibility
    h. Irritability
15. a. Cell membrane
    b. Cytoplasm
    c. Nucleus
    d. Mitochondria
16. a. Muscle
    b. Nerve
    c. Connective
    d. Epithelial
17. c
18. d
19. a
20. b
21. c
22. Can be any of the following:
    heart
    lungs
    liver
    kidneys
    gall bladder
    pancreas, etc.
23. b

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

Column I	Column II
____ 1. Neurology	a. Study of the functions of body parts and how they function to form a complete living organism
____ 2. Anatomy	b. The study of all forms of life
____ 3. Biology	c. Study of joints
____ 4. Physiology	d. Study of skeletal system
____ 5. Arthrology	e. Study of nervous system
	f. Study of the shape and structure of the body

Match terms associated with the organization of the body in Column I to their correct definitions in Column II.

Column I		Column II
____ 6. Osmosis	a.	Living substance of all cells
____ 7. Filtration	b.	Proteins which act as chemical catalysts in living organisms
____ 8. Protoplasm	c.	Study of cells, their origin, structure, and functions
____ 9. Enzymes	d.	Movement of particles through cell membrane, either in or out, when their concentration is greater on one side of the membrane than on the other
____ 10. Homeostasis	e.	Movement of particles in solution from a place of higher hydrostatic pressure to a place of lower hydrostatic pressure.
____ 11. Diffusion	f.	A state of chemical balance between a cell and its environment
____ 12. Metabolism	g.	Sum total of chemical reactions that occur in a living organism
____ 13. Cytology	h.	Movement of solvent molecules through a semipermeable membrane from a region of higher water concentration to lower concentration

14. List five functions of cells.

a.____

b.____

c.____

d.____

e.____

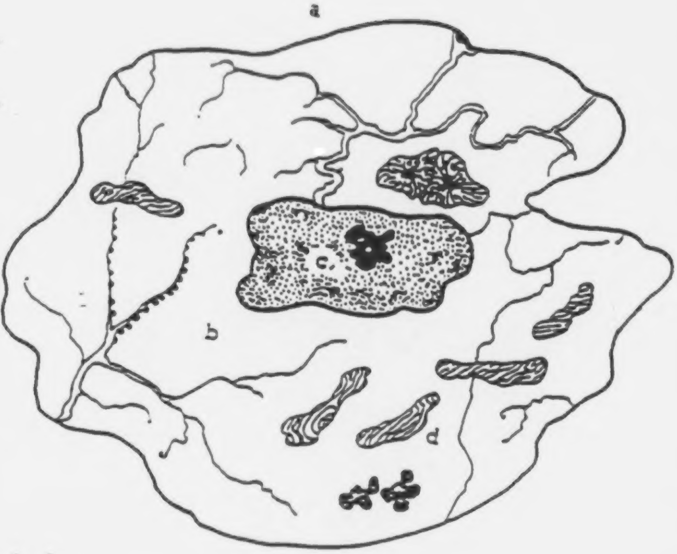
15. Label the parts of the cell indicated on the diagram.

a.________________________________

b.________________________________

c.________________________________

d.________________________________



16. List the four basic types of tissues in the body.

a.________________________________

b.________________________________

c.________________________________

d.________________________________

Match the following membranes with their functions.

	Membrane		Function
____ 17.	Mucous	a.	Covers body skin
____ 18.	Serous	b.	Acts as cushion, lines joints, secretes synovial fluid
____ 19.	Cutaneous	c.	Lines body cavities that opens to the outside and secretes mucus
____ 20.	Synovial	d.	Lines body cavities that do not open to the outside and secrete serous fluid

21. An organ is: (Circle the letter of the best answer.)

a. The basic unit of structure.
b. Tissue which lines a cavity.
c. A group of tissue performing a same function.
d. The same as a system.

22. List three examples of an organ.

a.________________________________

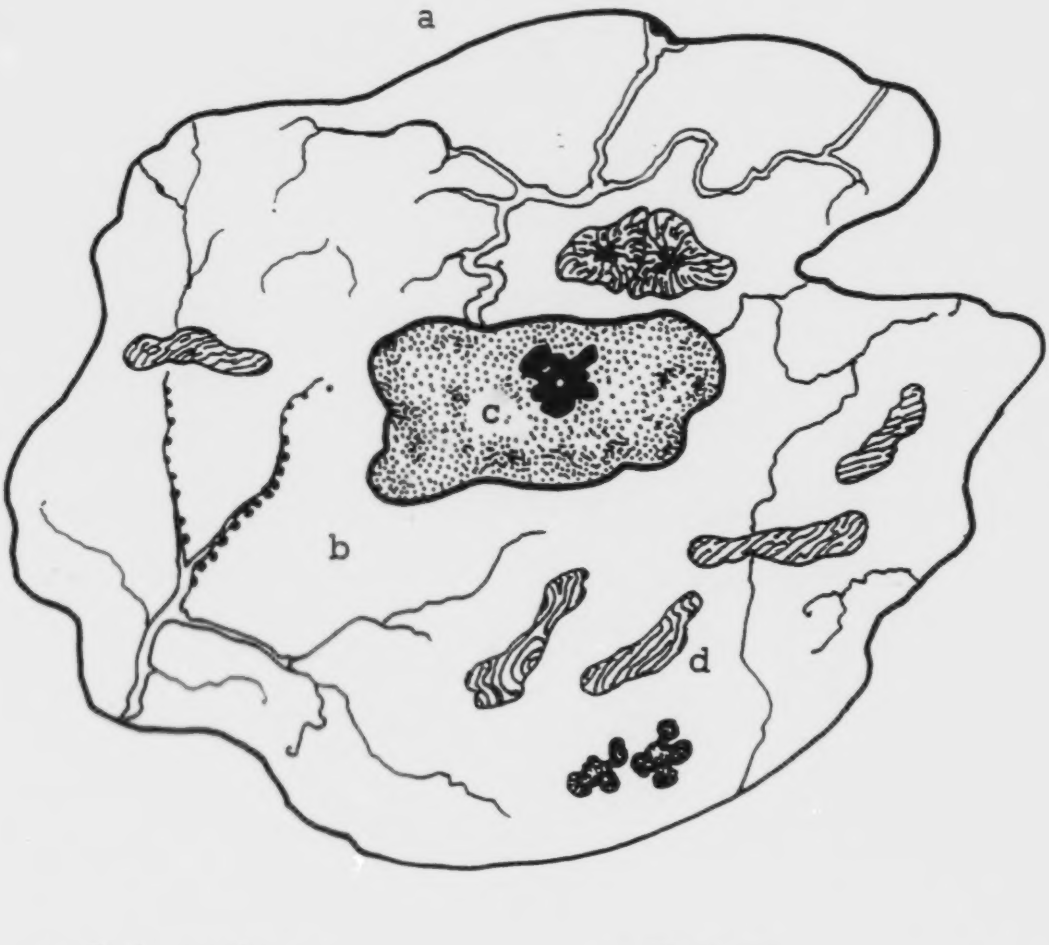
b.________________________________

c.________________________________

23. A system is: (Circle the letter of the best answer.)

a. Tissue which lines a cavity to the outside.
b. A group of organs performing the same function.
c. A group of tissues performing the same function.
d. The same as an organ.

THE CELL



a. Cell membrane	c. Nucleus
b. Cytoplasm	d. Mitochondrion

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-5 OR DEMONSTRATION:

SKIN SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with the correct definition.
2. Name the two main layers of the skin.
3. Label the various structures of the skin.
4. List five functions of the skin.
5. Match the appendages of the skin with their functions.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Skin Section
2. Anatomy charts

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 5 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, New York: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

The skin is classified as an organ and a system. The skin, due to the large area it covers, is the largest organ in the body and one of the most important. If approximately one third of the skin of a healthy adult is destroyed, death usually occurs. Melanin, a pigment found in the outer layer of the skin, gives us our skin color. The amount of melanin in your skin depends on the genes you inherited from your parents. The more melanin, the deeper the skin color.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions

  A. Dermal - of or pertaining to the skin **(II-1)**

  B. Dermatitis - inflammation of the skin

  C. Dermatologist - specialist in the diagnosis and treatment of skin diseases

  D. Dermatosis - any generalized skin disease

  E. Dermatomycosis - any fungal disease of the skin

  F. Sarcoma - tumor of fleshy or connective tissue

II. Structure of the Skin (HO 1) **(II-2, 3)**

  A. Two main layers

    1. Epidermis - outer, thinner layer; consists of stratified squamous epithelial tissue

    2. Dermis - lower layer; inner, thicker layer

      a. Consists of fibrous connective tissue

      b. Subcutaneous fat - part of the dermis

      c. Blood vessels - pass through elastic fibers in the dermis

      d. Hair follicle and shaft - consist of a root and shaft. Root is implanted in the skin. The shaft is the part that projects from skin surface.

      e. Sweat glands and ducts - The glands are located in the subcutaneous tissue just under the dermis. Small dusts connect the sweat glands to pinpoint-sized openings on the skin (pores).

      f. Nerve endings - located under the epidermis and around hair follicles

III. Functions of the Skin

- A. Protection **(II-4)**
    - 1. Protects against daily invasion of deadly microbes
    - 2. Bars entry of harmful chemicals
    - 3. Prevents suns ultraviolet rays from penetrating into interior of the body
- B. Environmental adjuster - sense organ receptors reveal changes in environment which could be harmful if not detected
- C. Manufactures vitamin D - must have sunshine
- D. Regulates body temperature and fluid content by varying the amount of sweat secreted
    - 1. To lose heat (cool) **(II-5)**
        - a. Blood vessels dilate, bringing heat to skin.
        - b. Skin temperature rises, so more heat is lost to cooler environment.
        - c. Sweat is released to cool by evaporation.
    - 2. To conserve heat (warm)
        - a. Sweating stops.
        - b. Blood vessels constrict.
        - c. Skin temperature falls.
- E. Excretion of wastes

IV. Appendages of the Skin

- A. Glands
    - 1. Sudoriferous - produce sweat **(II-6)**
    - 2. Sebaceous - secretes sebum, a fatty material which lubricates the skin to keep it soft and pliable
    - 3. Ceruminous - produce ear wax
- B. Hair - protection; covers entire body except palms of hands and soles of feet **(II-7)**

C. Nails - protection to nerve endings in fingers and toes; contain keratin, a protein substance that makes nails stiff

V. Summary and Conclusion

A. Terms and Definitions

B. Structure of the skin

C. Function of the skin

D. Appendages of the skin

Good care of the skin and its appendages is as important to your appearance and well-being as it is to those you care for in the health care facility. The next lesson is on the digestive system.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms found in this lesson?
2. What are the two main layers of the skin?
3. Where are the following structures located on HO 1: hair shaft, nerve endings, epidermis, dermis, blood vessel, sweat gland, fat, hair follicle.
4. What are the five functions of the skin?
5. How does the skin regulate body temperature?
6. What are the functions of the sudoriferous, sebaceous, and ceruminous glands, hair and nails?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Cosmetologist or dermatologist to speak about skin and hair care.
2. Examine a specimen of skin, hair, and nails under the microscope and compare the structure with a model or drawing of the skin.
3. Have students follow the lecture with HO 1 to visually identify the structures of the skin.

ANSWERS TO EVALUATION ITEMS:

1. e
2. f
3. b
4. a
5. d
6. Dermis and epidermis
7. Hair shaft
8. Nerve ending
9. Epidermis
10. Dermis
11. Blood vessel
12. Sweat gland
13. Fat
14. Hair follicle

15.
   a. Protection
   b. Environmental adjuster
   c. Manufactures vitamin D
   d. Regulate body temperature
   e. Excretion

16.
   a. To lose heat (cool)
      1. Blood vessels dilate, bringing heat to skin
      2. Skin temperature rises, so more heat is lost to cooler environment
      3. Sweat is released to cool by evaporation
   b. To conserve heat (warm)
      1. Sweating stops
      2. Blood vessels constrict
      3. Skin temperature falls

17. b
18. c
19. e
20. d
21. a

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the definition in Column II with the correct term in Column I.

		Column I		Column II
____	1.	Dermal	a.	Inflammation of the skin
____	2.	Dermatomycosis	b.	Tumor of fleshy or connective tissue
____	3.	Sarcoma	c.	Any generalized skin disease
____	4.	Dermatitis	d.	Specialist in the diagnosis and treatment of skin disease
____	5.	Dermatologist	e.	Of or pertaining to the skin
			f.	Any fungal disease of the skin

6. The two main layers of the skin are the ____________ and ____________.

Label the structures of the skin marked on the diagram.

7. ______________________

8. ______________________

9. ______________________

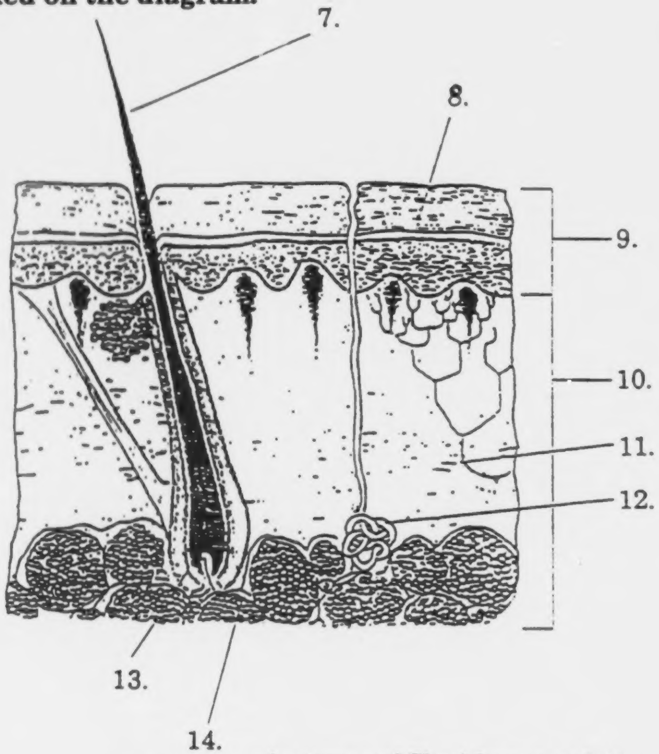
10. ______________________

11. ______________________

12. ______________________

13. ______________________

14. ______________________



15. The five functions of the skin are:

a.______________________________

b.______________________________

c.______________________________

d.______________________________

e.______________________________

16. Explain how the skin regulates body temperature.

a. To lose heat

1.____

2.____

3.____

b. To conserve heat

1.____

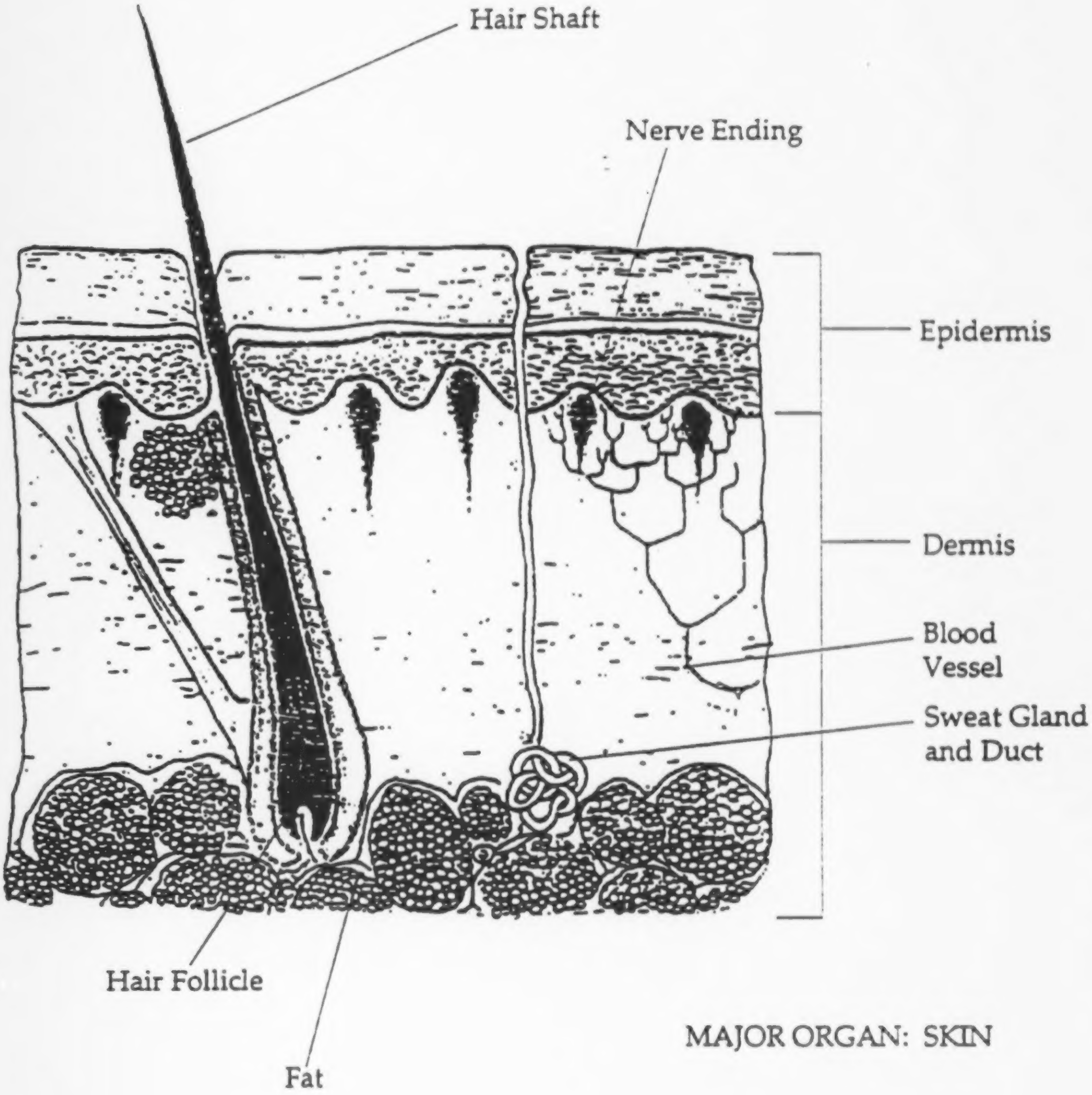
2.____

3.____

Match the terms related to skin appendages in Column II with the definitions in Column I.

Column I	Column II
____ 17. Protects the body but is not found on the palms of hands and soles of feet.	a. Ceruminous glands
____ 18. Protects nerve endings in toes.	b. Hair
____ 19. Produces sweat.	c. Nails
____ 20. Secretes sebum, a fatty substance.	d. Sebaceous glands
____ 21. Produces wax.	e. Sudoriferous glands

SKIN SECTION


Hair Shaft
Nerve Ending
Epidermis
Dermis
Blood Vessel
Sweat Gland and Duct
Hair Follicle
Fat

MAJOR ORGAN: SKIN

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-4 OR DEMONSTRATION:

DIGESTIVE SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with their correct definitions.
2. Describe the digestive system.
3. Describe the structure and function of the alimentary canal.
4. Label the true organs of the digestive system.
5. Describe the accessory organs of digestion and their functions.
6. Label the accessory organs of the digestive system.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Digestive System
2. HO 2: True Digestive Organs
3. HO 3: Junction of Stomach and Intestine
4. HO 4: Accessory Digestive Organs
5. HO 5: Molar
6. HO 6: Incisor

7. HO 7: Primary/Permanent Teeth

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 4 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

Digestion is the process of breaking complex foods into soluble, absorbable materials. The body then absorbs or stores the needed nutrients and eliminates the waste products.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

- A. -itis - suffix meaning inflammation of a part
- B. -logy - suffix meaning the study of
- C. Absorption - passing of a substance into body fluids and tissues
- D. Ailment - Latin term meaning food
- E. Alimentary canal - also known as the digestive tract and gastrointestinal tract
- F. Cholecystectomy - excision or removal of the gallbladder
- G. Cholecystitis - inflammation of the gallbladder
- H. Defecation - elimination of waste material from the rectum
- I. Deglutition - swallowing
- J. Digestion - the process of changing complex solid foods into simpler soluble forms which can be absorbed by the body cells
- K. Enteritis - inflammation of the intestine
- L. Enteron - means intestine
- M. Enzyme - organic catalyst that initiates and accelerates a chemical reaction
- N. Gastero - Greek term meaning food
- O. Gastritis - inflammation of the stomach
- P. Gastroenterology - study of the stomach and intestines and their diseases
- Q. Hepatic - of or pertaining to the liver
- R. Hepatitis - inflammation of the liver
- S. Ileitis - inflammation of the ileum
- T. Mastication - process of chewing

U. Mucosa - mucous membrane

V. Mucus - the slippery secretions of the mucous membrane, composed of mucin, various salts, and body cells

W. Peristalsis - progressive wave of contraction in a tubular structure provided with longitudinal and transverse muscular fibers, as in the esophagus, stomach, and small and large intestines

X. Polydipsia - excessive thirst

Y. Proctologist - specialist in the diagnosis and treatment of rectal disorders

Z. Proctoscopy - examination of the rectum by the use of a proctoscope

AA. Secretion - the expulsion of material which has been chemically modified by a cell to serve a purpose in another body process

BB. Sphincter - circular muscle, such as the anus

II. Digestive System (HO 1)

A. Description

1. The organs of the digestive system form an irregular-shaped tube, that is open at both ends.

2. This tube is also called the gastrointestinal tract or alimentary canal or GI tract.

3. Organs of the alimentary canal are found in the head, thorax, abdomen, and pelvis. **(II-2)**

4. It consists of the mouth, pharynx, esophagus, stomach, small and large intestines, and anus.

5. It is 20 to 30 feet long.

6. It is a tube within a tube. The body being one tube and the alimentary canal being the other tube. Food which we eat is in the alimentary canal, not in the body. Think of a car tire with an inner tube.

7. Accessory organs are the teeth, tongue, salivary glands, pancreas, liver, and gallbladder.

B. The four layers of the walls of the alimentary canal

1. Mucosa - the innermost lining; is made up of epithelial cells

2. Submucosa - consists of connective tissue with fibers, blood vessels, and nerve endings

    3. Circular muscle

    4. Longitudinal muscle

III. General Function of the Digestive System

  A. Transports food

  B. Physical breakdown of food - mastication (chewing)

  C. Chemical breakdown of food - food mixes with mucus that is produced by the lining of the gastrointestinal tract

  D. Absorption

  E. Elimination

IV. True Organs of the Digestive System

  A. Oral or buccal cavity - mouth (HO 2)

    1. Description - consists of a roof, a floor, and uvula

    2. Roof includes the hard and soft palates

      a. Hard palate contains bones: palatine bones and parts of the maxillary bones.

      b. Soft palate consists of muscle.

      c. It separates the mouth from the part of throat behind the nose (nasopharynx).

      d. The archway of the soft palate opens into the oropharynx which is the part of the throat behind the mouth.

    3. Uvula

      a. Hangs down from the center of the soft palate **(II-3)**

      b. Prevents food from entering the nasal cavity when swallowing

    4. Floor of the mouth - tongue and its muscles

      a. Attached to the floor of the mouth

      b. Function

        (1) Helps in chewing

        (2) Helps in swallowing

        c. Can be moved in many directions because it is made from skeletal muscle

        d. Attached to the hyoid, mandible, and two temporal bones

        e. Papillae - knob-like elevations

            (1) Papillae contain the taste buds.

            (2) We can taste salt, bitter, sweet, and sour.

            (3) They are also sensitive to cold, heat, and pressure.

    5. Function

        a. Taste

        b. Speech

        c. Chewing

        d. Swallowing

B. Pharynx

    1. Description

        a. A tube-like structure made of muscle

        b. Lined with mucous membrane

    2. Located behind the nasal cavities and the mouth

    3. Function

        a. The pharynx is part of the digestive and respiratory systems. **(II-4)**

        b. Air passes through the pharynx on its way to the lungs.

        c. Food passes through it on its way to the stomach.

C. Esophagus

    1. Description

        a. Sometimes thought of as the food pipe

        b. Muscular, mucous lined tube that connects the pharynx with the stomach **(II-5)**

    c. Approximately 10 inches long

  2. Function

    a. Passageway for food and water

    b. Produces mucous

D. Stomach (HO 3)

  1. Description

    a. Located in the upper part of the abdominal cavity, just to the left of and below the diaphragm **(II-6)**

    b. It is an elastic bag whose shape and position are determined by:

      (1) Amount of food eaten

      (2) Stage of digestion

      (3) Position of the body

      (4) Pressure exerted on it from the intestines

  2. Structure

    a. Divided into three portions

      (1) Fundus - upper portion

      (2) Body or greater curvature - middle section

      (3) Pylorus - lower portion

    b. Cardiac sphincter - circular layer of muscle

      (1) It is called the cardiac sphincter because of its proximity to the heart.

      (2) It controls the passage of food into the stomach.

    c. Pyloric sphincter valve - regulates the passage of food into the first part of the small intestine (duodenum)

    d. Four layers of the stomach wall

      (1) Mucous coat

        (a) Innermost layer

            - (b) Made up of small gastric glands
        - (2) Submucosa coat
            - (a) Made up of loose connective tissue
            - (b) Connects the mucous coat with the muscular coat
        - (3) Muscular coat
            - (a) Made up of three layers of smooth muscle
            - (b) Helps the stomach to undergo peristalsis: pushes the food into the small intestines
        - (4) Serosa - thick outer layer of the stomach
            - (a) Continuous with the entire inner abdominal cavity (peritoneum)
            - (b) Serosa and peritoneum meet at certain points, surrounding the organs around the stomach and holding them in place.
            - (c) Greater omentum - hangs in front of the intestines and contains a large amount of fat
- 3. Function
    - a. Digestion
    - b. Reservoir
    - c. Absorption
    - d. Destruction of bacteria
    - e. Secretion of gastric juices (hydrochloric acid)

E. Small intestine

- 1. Description
    - a. Coiled portion of the alimentary canal
    - b. Twenty (20) to twenty five (25) feet long
    - c. One (1) inch in diameter
    - d. Contains thousands of microscopic glands (intestinal glands) that secrete the intestinal digestive juices

e. It is a smooth muscle that produces peristalsis.

f. The lining of the small intestine is covered with millions of small projections called villi. This is where the digested part of food passes through the villi into the blood stream and then to the body cells.

2. Structure in order of location **(II-7)**

   a. Duodenum - first portion

   b. Jejunum - middle portion

   c. Ileum - last portion

3. Function

   a. Storage

   b. Digestion

      (1) Digestion breaks up fat into small droplets so the digestive juices can act upon it. This is done with bile from the liver which is poured into the duodenum.

      (2) Pancreatic juice, which is poured into the duodenum from the pancreas, continue the digestion of protein which started in the stomach. It also acts on starch and digests fat.

      (3) Enzymes of the intestinal juices complete the digestion of carbohydrates and proteins.

   c. Absorption - the combination of the actions of bile, pancreatic juice, and intestinal juice complete the process of breaking down food for absorption into the blood stream.

F. Large intestine

1. Description

   a. Often referred to as the colon

   b. Approximately 5 to 6 feet long and 2 inches in diameter

   c. It starts at the lower right hand corner of the abdominal cavity and goes up, across, and down.

2. Structure

   a. Cecum

      (1) The cecum is a blind pouch located slightly below the ileocecal (or colic) valve, in the lower right portion of the abdomen.

      (2) The ileocecal valve is the opening through which the ileum empties into the colon.

   b. Appendix - a finger-like projection that protrudes into the abdominal cavity

   c. Colon - consists of four parts: ascending, transverse, and descending, and sigmoid **(II-8)**

      (1) Ascending colon - located upward, along the right side of the abdominal cavity, to the underside of the liver

      (2) Transverse colon - located across the abdominal cavity

      (3) Descending colon - located down the left side of the abdominal cavity

      (4) Sigmoid colon - the S-shaped bend of the colon located in the pelvis; becomes rectum

   d. Rectum - part of the large intestine that is about 12 centimeters long and opens into the anus.

   e. Anus - the opening at the terminal end of the anal canal; two sphincter muscles stay contracted to keep the anus closed except when one is having a bowel movement.

3. Function

   a. Water absorption

      (1) It draws water from undigested food that passes through the colon. **(II-9)**

      (2) A large amount of this water is absorbed back into the blood stream.

   b. Bacterial action

      (1) Shortly after birth, bacteria enter our bodies through the food we eat.

(2) Some of the bacteria are destroyed by the acid found in the colon. A large number continue into the colon where they form what is called flora.

(3) The flora acts upon undigested food. Some flora are excreted through the colon.

(4) The bacterial action also helps in the formation of a moderate amount of B-complex and vitamin K which our bodies need for blood clotting.

c. Reabsorbs bile salts

d. Fecal formation

e. Defecation

(1) Approximately every 12 hours, fecal material moves into the lower colon and rectum.

(2) Peristalsis begins, which causes nerve endings in the rectum to be stimulated.

(3) The nerve impulses are transmitted first to the spinal cord, then to the colon, rectum, and internal small sphincter muscle.

V. Accessory Organs of Digestion (HO 4)

A. Teeth

1. Description (HOs 5, 6, & 7)

a. The gums support and protect the teeth.

b. The teeth chew food and break it down into small morsels which enables the digestive enzymes to digest the food.

c. We get two sets of teeth, the deciduous and the permanent teeth.

2. Structure - three main parts: crown, neck, and root

a. Crown

(1) Exposed visible part in your mouth

(2) Covered with enamel for grinding during chewing

(3) Also covered by two other dental tissues: dentin and cementum

(a) Dentin makes up the greatest part of the tooth shell. It is covered by enamel in the crown area. It contains a pulp cavity which consists of connective tissue, blood and lymphatic vessels, and sensory nerves.

(b) Cementum covers the tooth shell in the neck and root areas.

b. Neck - narrow portion that is surrounded by gum tissue and that joins the crown of the tooth to the root

c. Root - fits into the socket of either the upper or lower jaw

d. Types **(II-10)**

(1) Deciduous or primary (baby teeth)

(a) We begin to get these teeth at approximately six (6) months of age and continue to about two (2) years of age.

(b) Twenty (20) are cut - 10 uppers and 10 lowers

(c) 4 incisors, 2 canines, and 4 molars

(d) They last to about the age of six (6).

(2) Permanent

(a) 32 permanent teeth push out the deciduous teeth.

(b) 8 incisors - cut food

(c) 4 canines - shred food

(d) 8 premolars or first molars - crush and grind food

(e) 12 molars (four wisdom teeth) - crush and grind food

B. Salivary glands

1. Description

a. Located outside the alimentary tract

b. Convey their secretions by way of ducts into the alimentary tract

c. Produce a watery secretion called saliva

2. Location **(II-11)**

a. Parotid salivary gland - on both sides of the face, in front of and below the ears

b. Submaxillary gland - located near the angle of the lower jaw; sometimes called the submandibular gland

c. Sublingual gland - found under the sides of the tongue

3. Function

a. Saliva softens and lubricates food making it easier to chew and swallow. It also dissolves part of the food so it can be tasted.

b. Saliva contains an enzyme ptyalin which digests starches to dextrose. This process is continued in the stomach.

c. Saliva aids in speech by keeping the mouth flexible and moist.

C. Liver

1. Description - classified as an exocrine gland because its cells secrete bile into ducts

2. Location

a. On the upper right side of the abdominal cavity just below the diaphragm; extends partway over onto the left side.

b. It contains four lobes. **(II-12)**

3. Function

a. Manufactures bile and passes it to the gallbladder where it is stored and released for the digestion of fat when needed

b. Produces and stores glycogen from unused digested sugars

c. Removes certain waste products from the blood stream and changes them into a form that can be excreted by the kidneys

d. Aids in the metabolism of all kinds of foods

e. Produces blood protein or plasma proteins which are essential for blood clotting

f. Helps maintain blood volume

g. Detoxifies various poisonous substances and certain drugs

D. Gallbladder **(II-13)**

1. Located on the underneath surface of the liver

2. Function - stores and releases bile to emulsify fats

VI. Summary and Conclusion

A. Terms and definitions

B. Digestive system

C. General functions of the digestive system

D. True organs of the digestive system

E. Accessory organs of digestion

In the next lesson, you will learn what happens to the food you eat and why it is important to have a daily diet which includes the essential nutrients.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms found in this lesson?
2. What organs make up the alimentary canal?
3. Where is the uvula located?
4. What is the function of the pharynx?
5. Where is the esophagus located?
6. Where is the stomach located?
7. What are the names of the three portions of the small intestine?
8. Where are the ascending colon, transverse colon, and descending colon located?
9. Where does the majority of food absorption take place?
10. What is the name of the two types of teeth we have during our lifetime?
11. Where are the parotid, submaxillary, and sublingual salivary glands located?
12. How many lobes does the liver have?
13. Where is the gallbladder located?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Locate on an anatomical model the true digestive organs, then the accessory organs.
2. Trace a bite of food from ingestion to defecation. Explain what happens to food along its way through the digestive system.
3. Invite a dental hygienist, dental assistant, or dentist to speak on care of teeth.

ANSWERS TO EVALUATION ITEMS:

1. b
2. f
3. g

4. a
5. d
6. e
7. d
8. b
9. c
10. a
11. d
12. b
13. c
14. b
15. Deciduous or primary and permanent
16. d
17. lobes
18. liver

19. a. mouth
    b. pharynx
    c. esophagus
    d. stomach
    e. large intestine
    f. small intestine

20. a. teeth
    b. salivary glands
    c. liver
    d. gallbladder
    e. pancreas

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

Column I	Column II
____ 1. Alimentary canal	a. The process of changing complex solid foods into simpler soluble forms which can be absorbed by the body cells
____ 2. Mastication	b. Also known as the digestive tract and gastrointestinal tract
____ 3. Defecation	c. Organic catalyst that initiates and accelerates a chemical reaction
____ 4. Digestion	d. Passing of a substance into body fluids and tissues
____ 5. Absorption	e. The expulsion of material which has been chemically modified by a cell to serve a purpose in another body process
____ 6. Secretion	f. Process of chewing
	g. Elimination of waste material from the rectum

7. Which one of the following statements best describes the digestive system? (Circle the letter of the best answer.)

   a. The organs of the digestive system form a straight tube that is open at one end.
   b. Food which we eat enters the body through the mouth.
   c. The submucosa is the innermost lining of the alimentary canal.
   d. The alimentary canal consists of the mouth, pharynx, esophagus, stomach, small and large intestines, and the anus.

8. What is the structure of the mouth which hangs down from the center of the soft palate called? (Circle the letter of the best answer.)

   a. Roof
   b. Uvula
   c. Floor
   d. Side wall

9. A structure of the digestive system which also functions as part of the respiratory system is called the: (Circle the letter of the best answer.)

   a. Larynx.
   b. Esophagus.
   c. Pharynx.
   d. Tongue.

10. The esophagus connects the: (Circle the letter of the best answer.)

   a. Pharynx with the stomach.
   b. Uvula with the pharynx.
   c. Stomach with the ileum.
   d. Jejunum with the appendix.

11. Where is the stomach located? (Circle the letter of the best answer.)

   a. Upward, along the right side of the abdominal cavity
   b. Across the abdominal cavity
   c. Down the left side of the abdominal cavity
   d. Upper part of the abdominal cavity, to the left, and below the diaphragm

12. Which one of the following is NOT a structure of the small intestine? (Circle the letter of the best answer.)

   a. Duodenum
   b. Sigmoid colon
   c. Ileum
   d. Jejunum

13. Where is the descending colon located? (Circle the letter of the best answer.)

   a. Across the abdominal cavity
   b. Upward, along the right side of the abdominal cavity
   c. Down the left side of the abdominal cavity
   d. At the end of the duodenum and connected to the cecum

14. Most food absorption takes place in the: (Circle the letter of the best answer.)

   a. Stomach.
   b. Small intestine.
   c. Colon.
   d. Large intestine.

15. Two types of teeth which we have during our lifetime are the ______________________ and ______________________.

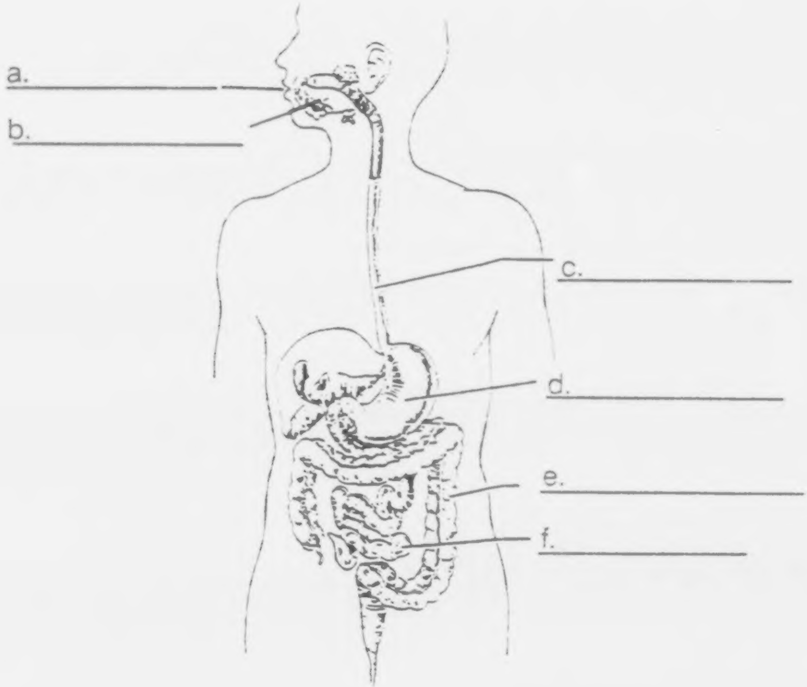
16. Where is the parotid salivary gland located? (Circle the letter of the best answer.)

   a. Inside the alimentary tract
   b. Near the angle of the lower jaw
   c. Under the sides of the tongue
   d. Both sides of the face, in front and below the ears

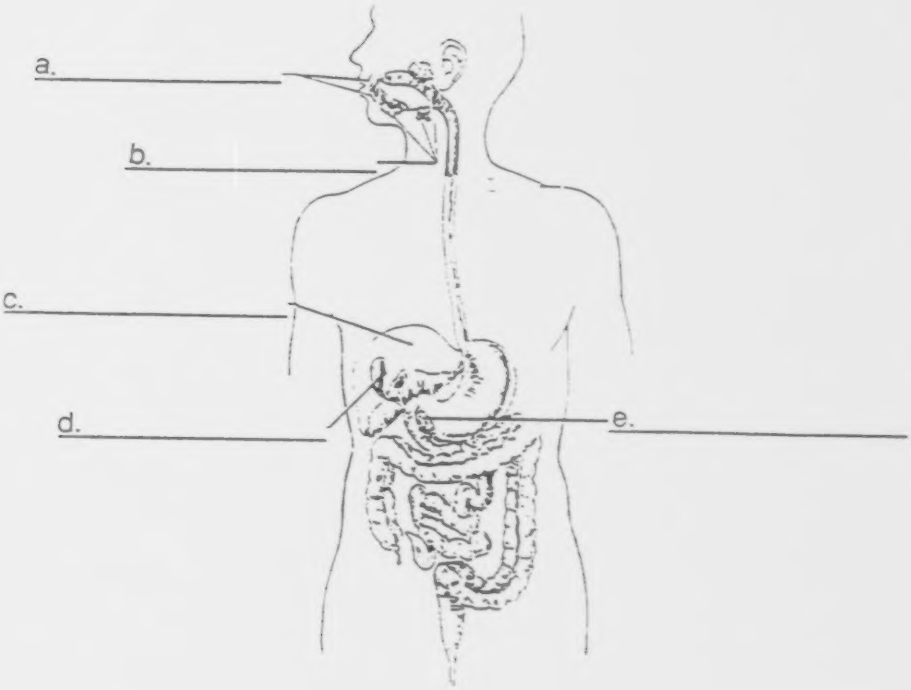
17. The liver contains four ____________________.

18. The gallbladder is located on the underneath surface of the ____________________.

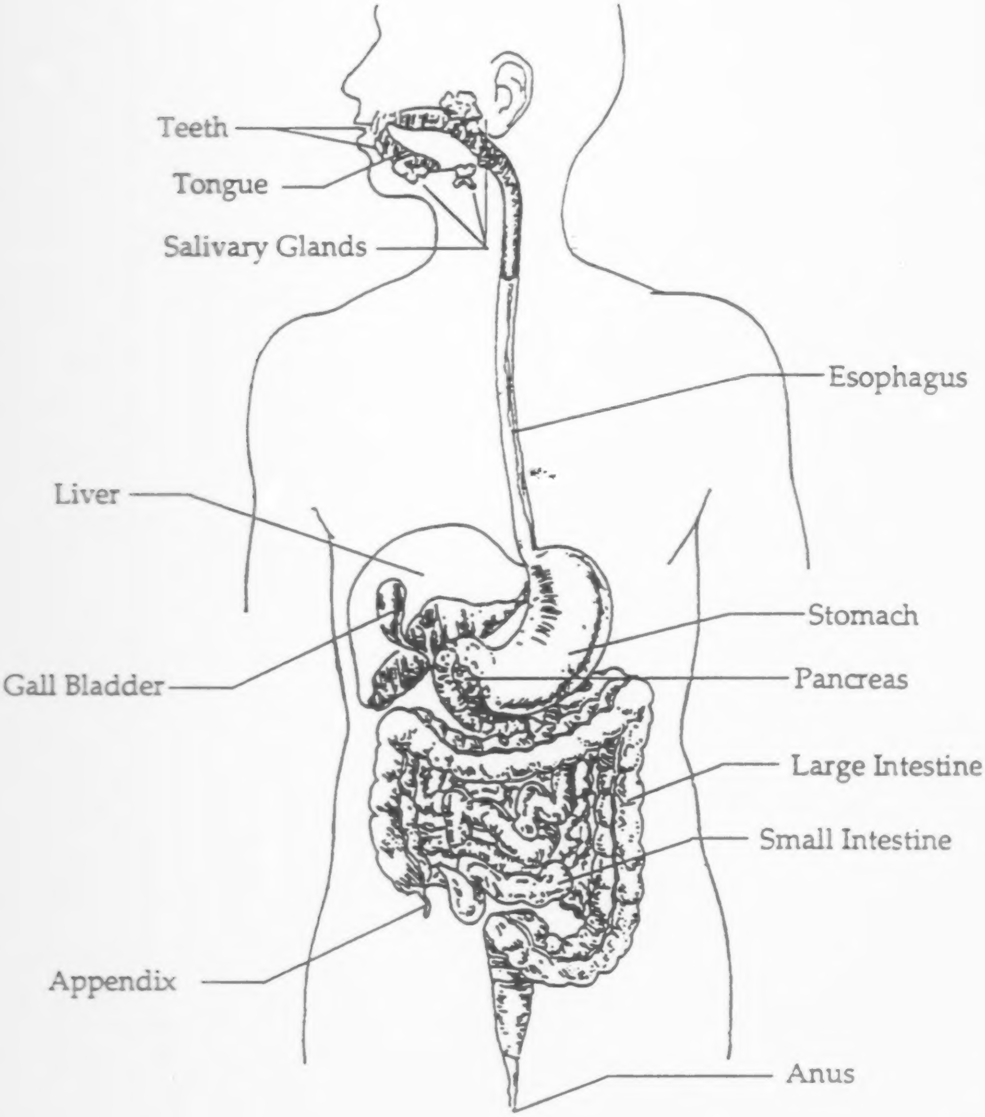
19. Label true parts of the digestive system on the diagram below.



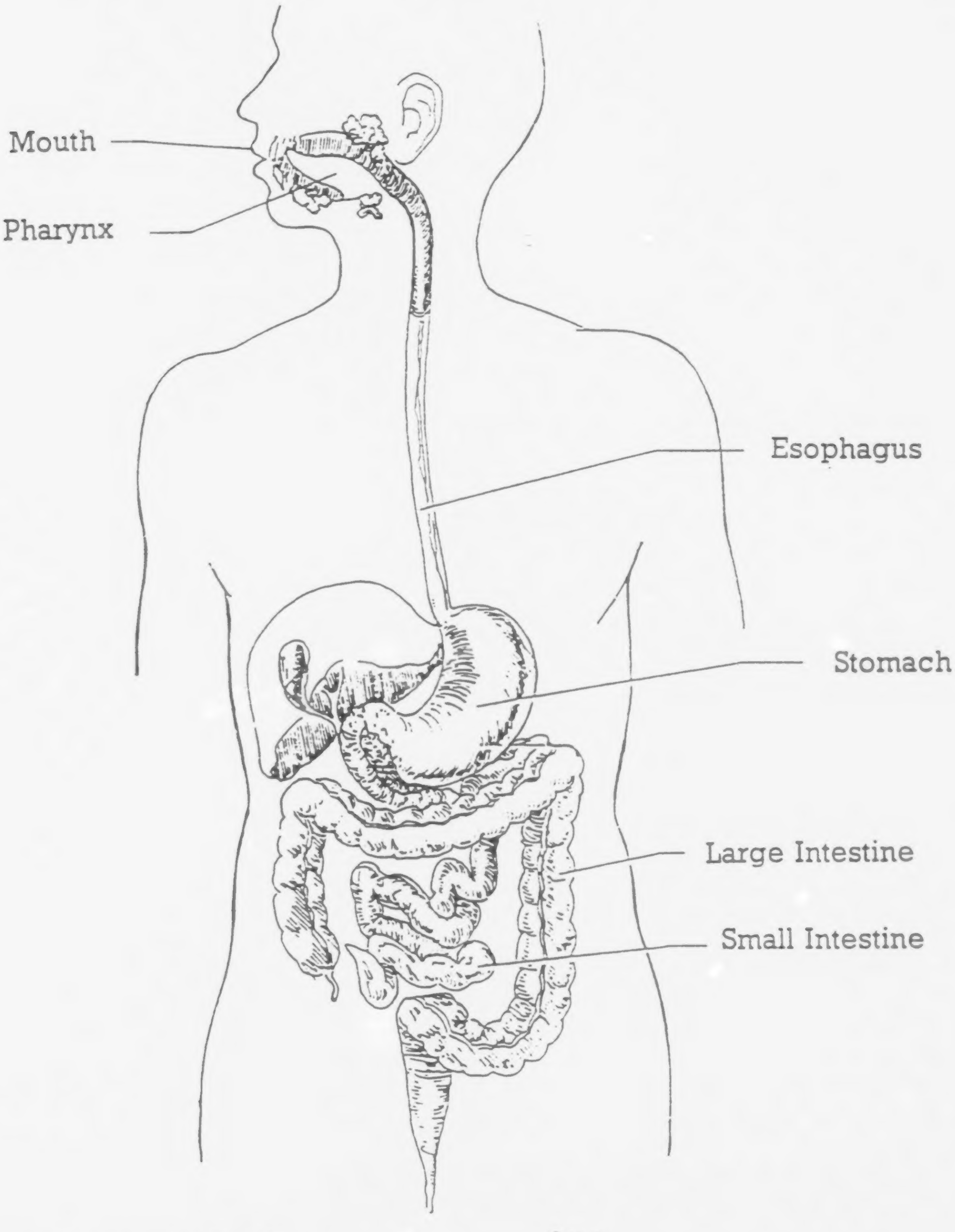
20. Label the accessory organs of the digestive system on the diagram below.



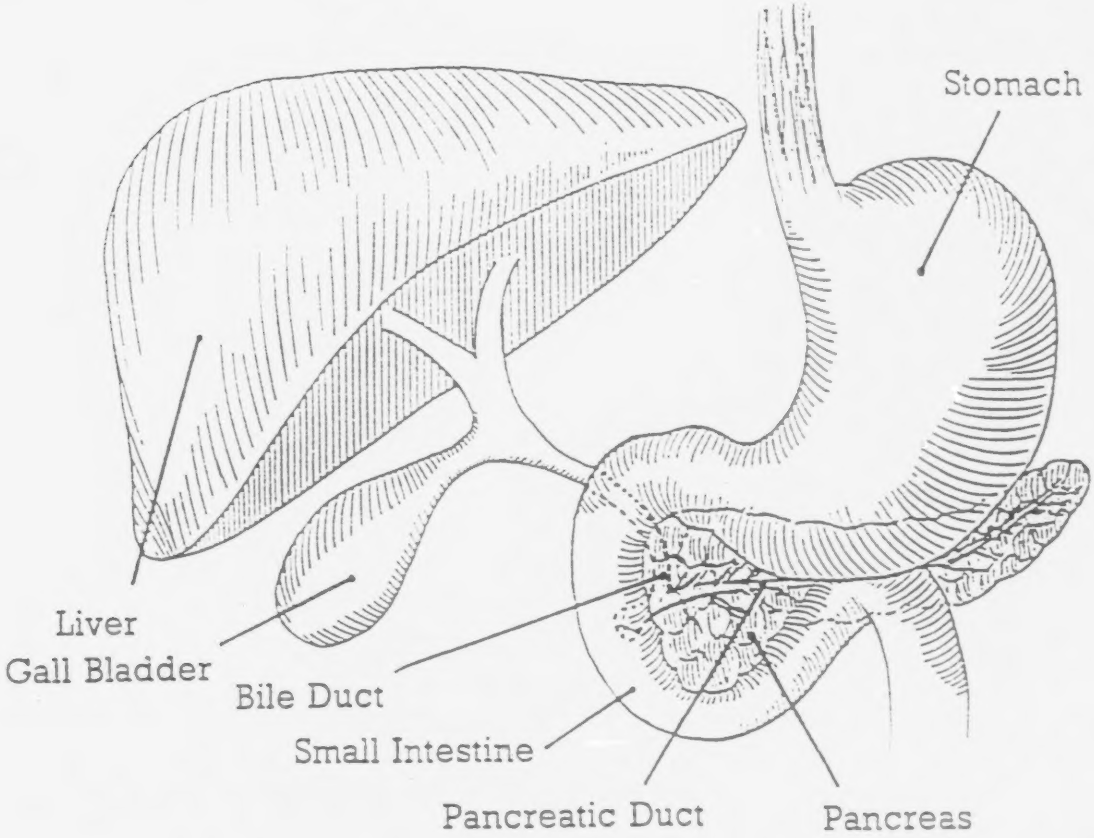
DIGESTIVE SYSTEM


Teeth
Tongue
Salivary Glands
Esophagus
Liver
Stomach
Gall Bladder
Pancreas
Large Intestine
Small Intestine
Appendix
Anus

TRUE DIGESTIVE ORGANS

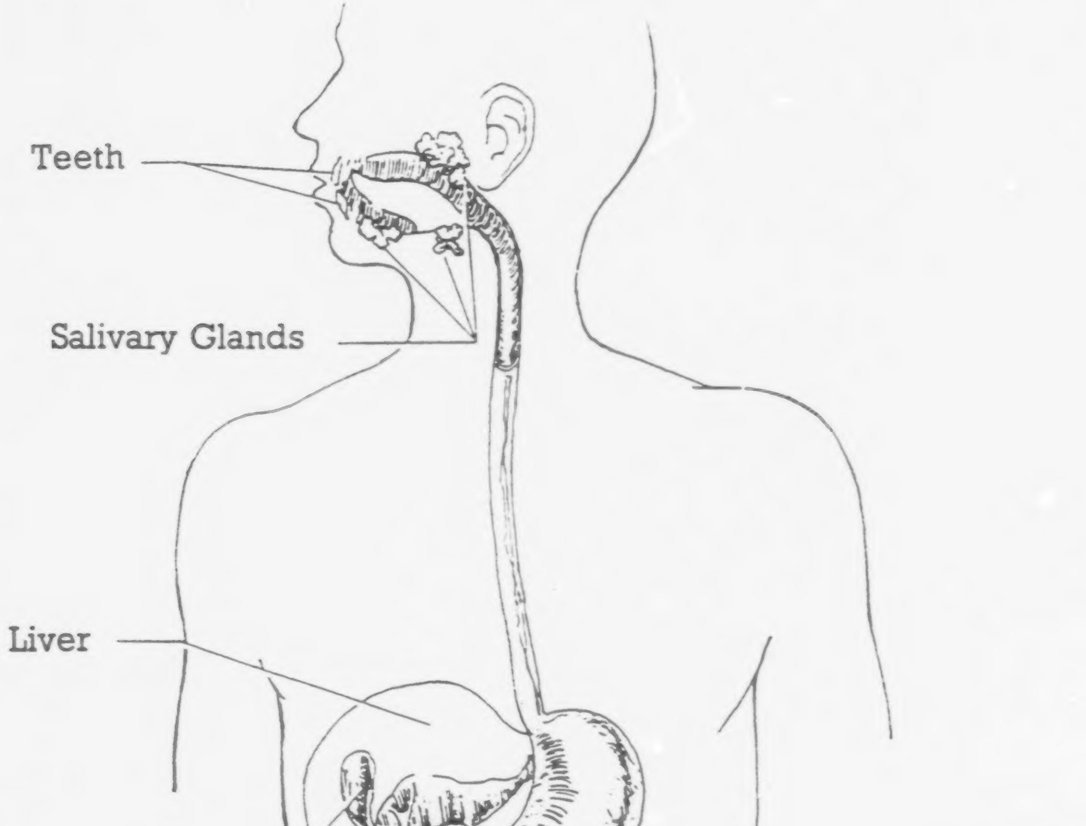

Mouth
Pharynx
Esophagus
Stomach
Large Intestine
Small Intestine

JUNCTION OF STOMACH AND INTESTINE

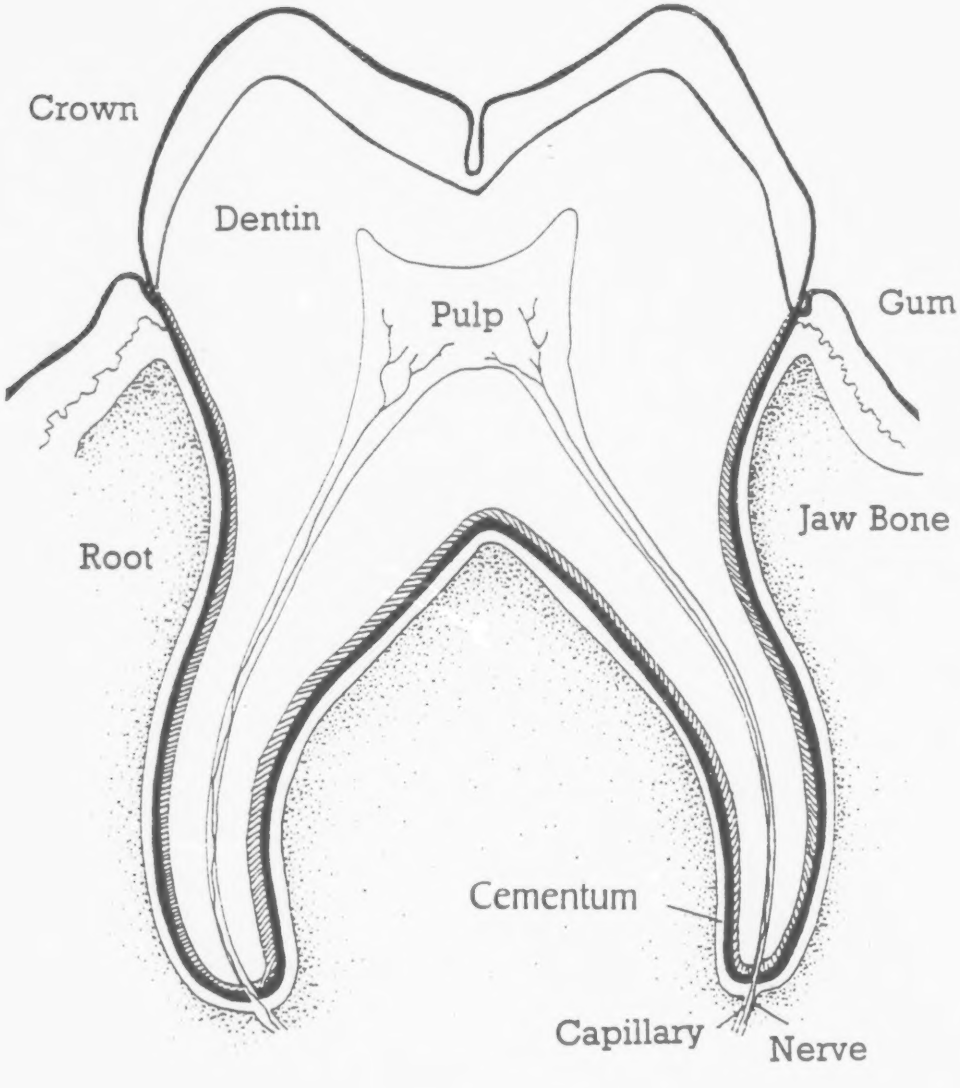

Stomach
Liver
Gall Bladder
Bile Duct
Small Intestine
Pancreatic Duct
Pancreas

Anatomy and Physiology, page 5.71

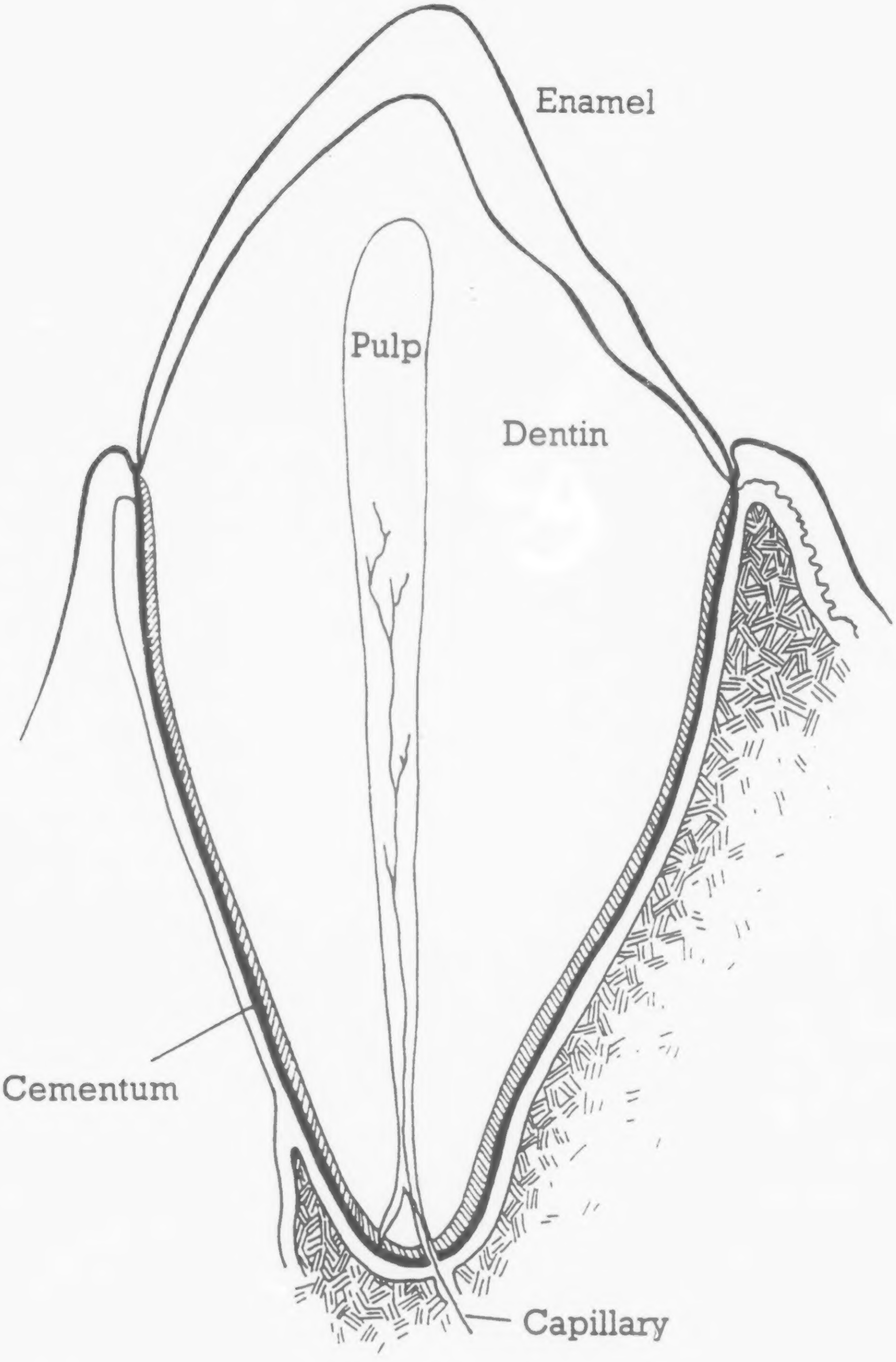
ACCESSORY DIGESTIVE ORGANS


Teeth
Salivary Glands
Liver
Gall Bladder
Pancreas

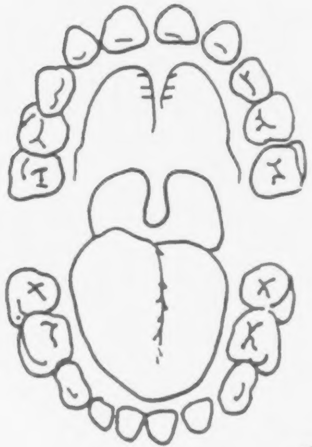
MOLAR


Crown
Dentin
Pulp
Gum
Jaw Bone
Root
Cementum
Capillary
Nerve

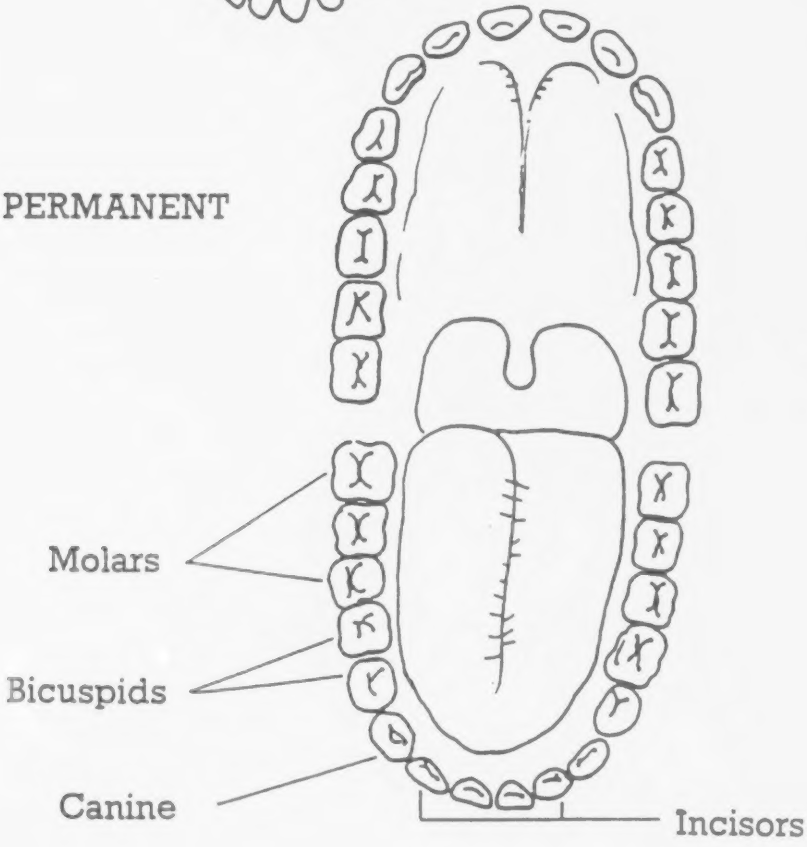
INCISOR


Enamel
Pulp
Dentin
Cementum
Capillary

PRIMARY/PERMANENT TEETH



PRIMARY OR DECIDUOUS



PERMANENT

Molars
Bicuspids
Canine
Incisors

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-5 OR DEMONSTRATION:

NUTRITION
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms presented in this lesson to correct definitions.
2. Match the five categories of nutrients with their functions.
3. List foods included in each of the food groups.
4. Identify foods from six special diets commonly ordered in health care facilities.
5. Identify two methods of providing a nutritionally complete liquid diet.
6. Discuss the importance of non-nutrients.
7. Discuss the nutritional needs of clients.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: General Nutrition
2. HO 2: Food Pyramid
3. HO 3: Suggested Weights for Adults
4. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *Food Safety is No Mystery*, video (T.F. #96), 34 min.
    b. *Cholesterol...A New Outlook*, video (T.F. #137), 11 min.

    c. *Exchange Lists for Meal Planning*, video (T.F. #88), 60 min.
    d. *Nutritional Aspects of the AIDS Patient*, video (T.F. #139), 28 min.
    e. *Operation of the Flexifol Companion Pump*, video (T.F. #95), 39 min.
    f. *The Right Choice*, video (T.F. #182), 22 min.

5. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 5 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 19 and 20.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 16.

Missouri Dietetic Association and Missouri Division of Health. *Missouri Diet Manual*. 7th ed. 1992.

Shalala, D., et.al. *FDA Consumer Special Report: Focus on Food Labeling*. Rockville, MD: Food and Drug Administration. 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 9.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 9.

INTRODUCTION:

Food is very important to all of us, no matter what our age. The whole process of taking in food and producing energy from it is called nutrition. Nutrition becomes extremely important for the health care client who may have some impairment in his/her digestive process. The elderly person needs the same nutrition as he/she did at an earlier age, but fewer calories are required. It is important that we understand basic nutrition.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Digestion - process by which food is broken down, mechanically and chemically, and changed to a form that can be absorbed by the body

   B. Nutrient - food that supplies the body with its necessary elements

   C. Nutrition - the process of taking in food and producing energy from it

   D. Peristalsis - wave-like movements of the digestive tract which move food through

   E. Residue - what remains of something after a part is removed

   F. Roughage - indigestible fiber of fruits, vegetables, and cereal which acts as a stimulus to aid intestinal peristalsis

II. Five Categories of Nutrients (HO 1) **(II-2)**

   A. Protein

      1. Functions are to build and repair tissue, help build blood, help form antibodies and provide energy.

      2. If excess protein is taken in, the body will change it to fat and store it as fat.

      3. Sources - eggs, meat, fish, poultry, dairy products, nuts, and beans **(II-3)**

   B. Carbohydrates

      1. Give the body a source of immediate energy

      2. Broken down by digestive process into simple sugars (The most important one is glucose.)

      3. If excess carbohydrates are taken in, the body will convert them to fat.

      4. Sources - breads, cereals, sugar, syrup, fruits, and vegetables **(II-4)**

   C. Fats

      1. Main function is to be stored as energy for later use.

2. Sources - butter, cream, salad oil, whole milk, meat, fish, and nuts **(II-5)**

D. Vitamins

1. Vitamins are important for the proper breakdown and use of nutrients.

2. A well-balanced diet contains sufficient amounts of vitamins.

3. Vitamins may be destroyed by overcooking or exposure to air.

4. Identified by letters such as A, B-complex, C, D, E, and K

5. Sources - vary with each vitamin

E. Minerals

1. Regulate many body processes

2. Examples - calcium, phosphorus, sodium, iron

3. Sources - vary with each mineral

III. The Food Pyramid is based on United States Department of Agriculture's research on what foods Americans eat, what nutrients are in these foods, and how to make the best food choices to promote good health. (HO 2) **(II-6,7)**

A. Grain Group **(II- 8)**

1. Ex.: enriched or whole grain breads and cereals, crackers, pasta, and rice.

2. 6-11 servings from this group a day.

B. Vegetable Group **(II-9)**

1. Ex.: vegetable juices, raw vegetables, raw leafy vegetables, cooked vegetables, potatoes.

2. 3 - 5 servings from this group a day.

C. Fruit Group **(II-10)**

1. Ex.: canned, frozen, cooked, or raw fruits, fruit juices

2. 2 - 4 servings from this group a day.

D. Milk Group **(II-11)**

1. Ex.: milk (whole, 2%, skim) yogurt, buttermilk, cream, ice cream, and cheese.

2. 2 - 3 servings from this group a day.

E. Meat, Poultry, Fish Group

1. Ex.: beef, pork, poultry, fish, eggs, dried beans, dried peas, and nuts.

2. Eggs, dried beans, dried peas, and nuts are included in this group because they are a major source of protein.
(II-12)

2. 2 - 3 servings from this group a day.

F. Fats, Oils, & Sweets

1. Limit calories from this group.

2. Limit especially if on a weight reduction program because they are high in calories. (HO 3)

IV. Special Diets **(II-13)**

A. Liquid - foods that are liquid or become liquid at room temperature

1. Clear liquid (surgical) - measure intake

a. Minimal residue, consists mainly of dissolved sugar and flavored fluids, no milk; not nutritionally adequate alone

b. The liquid should be transparent, meaning it can be seen through. Examples: coffee, tea, broth, and gelatin

c. Usually ordered before and after an operation

2. Full liquid (medical) - measure intake

a. Strained semiliquid food and any liquid

b. Examples: fruit juice, milk, pudding, ice cream, and creamed soups

c. Usually ordered if client has flu or diarrhea

B. Soft

1. Foods easily chewed

2. Fibrous and highly seasoned foods eliminated

3. Examples - tender chopped or ground meat, poultry, and well-cooked peeled fruits and vegetables

C. Diabetic - requires closer monitoring **(II-14)**

1. Ordered for client with diabetes mellitus
   a. Diabetes mellitus is a chronic disease in which there is a deficiency of insulin in the body.
   b. A lack of insulin causes sugar to build up in the blood stream and this sugar cannot be used by the cells for energy.
2. Since carbohydrates are broken down into sugar during digestion, the amount of carbohydrates is controlled with the diabetic diet.
3. The doctor determines the diabetic diet, which is the amount of carbohydrates, fats, proteins, and calories that a client should have.
4. The calories and nutrients allowed are divided among three meals and between-meal nourishments.
5. The client must eat only what is allowed and all that is allowed.
6. The American Dietetic Association provides food lists that have equal value in terms of nutrients and calories.
   a. The foods are grouped into six lists: milk, vegetables, fruits, bread, meat, and fat. These lists are called "Exchange List."
   b. The exchanges allow variety in menu planning.
7. Diabetics must eat at regular intervals to maintain a certain blood sugar level. The tray must be served on time.
8. The health care assistant must check the tray and report what food has been eaten. If all food is not eaten, a between-meal nourishment may be needed.

D. Bland

1. No roughage; easily digested and low in spices - example: mashed potatoes, cream of wheat
2. Ordered for clients with ulcers or irritated digestive tracts

E. Low salt (low sodium)

1. Salt occurs naturally in food. This diet eliminates salty food and salt added to food.
2. Sodium is a mineral that helps regulate the body's water balance.
3. No table salt on tray or table

4. Check with charge nurse before giving client a salt substitute. (High potassium)

F. Low cholesterol - eliminates animal fats from diet, allows some types of vegetable fats

V. Nutritionally Complete Liquid Diets

A. Oral

1. Given by mouth for client to drink

2. May be a supplement to regular diet or may be the only nutrition the client takes in

3. May be commercially prepared, such as Ensure® or Sustagen®

B. Tube feedings

1. Given by a nasogastric tube (NG tube) inserted into the nose that goes down the esophagus into the stomach or by a gastrostomy tube (G tube) that goes directly into the stomach; head of bed is elevated during administration; intake and output are recorded

2. May be a supplement to regular diet or may be the only nutrition the client takes in

VI. Non-Nutrients **(II-15)**

A. Fiber

1. The non-nutritive part of plant food--the indigestible part

2. Provides bulkiness to the stool--the softer the stool, the easier it is to eliminate, thus preventing constipation

3. Sources - whole wheat, bran, outside of corn kernels and peas, fruit and potato skins

B. Water

1. Water is essential to life; a person can live only a few days without water. It provides minerals but no other nutrients. The body requires 2,000 to 3,000 cc daily.

2. Sixty percent of the human body is water.

3. Fluid intake must match what is lost normally by urination, defecation, perspiration, and respiration. Other losses may occur by vomiting, drainage from wounds, hemorrhage, extensive burns, and diaphoresis.

4. Illness may upset water balance.

5. Dehydration is an excessive loss of water from body tissues. Symptoms may include: thirst, although the elderly often do not get "thirsty" (which is why water should be offered frequently); dryness of skin and mucous membranes (inside of nose and mouth); constipation; little or no urination; fall in BP; rise in temperature; loss of tissue elasticity; dizziness and mental confusion.

   CAUTION: When these symptoms are observed, the person is in advanced dehydration and at risk. **(II-16)**

6. Edema occurs when there is too much fluid in the tissue. Symptoms include swelling, shortness of breath, increase in weight, decrease in urine.

7. An elderly client with an indwelling catheter should have up to 3,000 cc of fluid to maintain the flow of urine and prevent bladder infections unless contraindicated.

VII. Nutritional Needs of Clients **(II-17)**

A. USDA recommended servings:

1. Grain group - 6-11 servings
2. Fruit group - 2-4 servings
3. Vegetable group - 3-5 servings
4. Milk group - 2-3 servings
5. Meat group - 2-3 servings
6. Modest amount of fat and sweets

B. The number of calories needed depends on body size and activity for both men and women.

VIII. Summary and Conclusion

A. Terms and definitions

B. Five categories of nutrients

C. Basic food groups

D Special diets

E. Nutritionally complete liquid diets

F. Non-nutrients

G. Nutritional needs of clients

You should now have an understanding of the importance of diet for the clients as well as for yourself. If nutritional needs are not being met, problems will arise. Take note of the food you serve to the clients and how it fits into a well-balanced diet. Also note what foods you should encourage the client to eat. The next lesson is on the skeletal system.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What do digestion, nutrient, peristalsis, residue, and roughage mean?
2. What are the five categories of nutrients and their functions?
3. Name some foods that are high in protein.
4. What are some examples of foods high in carbohydrates?
5. What are some examples of foods high in fats?
6. What are the basic food groups?
7. How many servings per day are recommended for each of the basic food groups?
8. Why are the recommended servings in the grain group so much higher than the other groups?
9. Name some foods in the vegetable group that you particularly like or dislike.
10. Name some foods in the fruit group that you particularly like or dislike.
11. Name some foods in the milk group that you particularly like or dislike.
12. Why are poultry, fish, eggs, dried beans, dried peas, and nuts included in the meat group?
13. What foods are included in a full liquid diet?
14. Why is close monitoring required of the client receiving a diabetic diet?
15. What are two non-nutrients?
16. Why are fiber and water important in the diet?
17. How do elderly clients' nutritional needs differ from your nutritional needs?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Assign students to keep a food intake chart for one day and classify foods in each food group.

2. Have guest dietitian speak to class on nutritional needs of the older adult.

3. Show audiovisuals.

4. Have students keep track of the number of calories they consume in a week.

ANSWERS TO EVALUATION ITEMS:

1. f
2. e
3. d
4. b
5. a
6. c
7. d
8. e
9. b
10. a
11. c
12. b
13. c
14. b
15. c
16. d
17. b
18. b
19. a
20. d
21. d
22. a
23. c

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match each term in Column I to the correct definition in Column II.

Column I

___ 1. Peristalsis

___ 2. Roughage

___ 3. Nutrient

___ 4. Residue

___ 5. Digestion

___ 6. Nutrition

Column II

a. Process by which food is broken down, mechanically and chemically, and changed to a form that can be absorbed by the body

b. What remains of something after a part is removed

c. The process of taking in food and producing energy from it

d. Food that supplies the body with its necessary elements

e. Indigestible fiber of fruits, vegetables, and cereal which acts as a stimulus to aid intestinal peristalsis

f. Wave-like movements of the digestive tract which move food through

Match the categories of nutrients in Column I with the correct function in Column II.

Column I

___ 7. Protein

___ 8. Carbohydrates

___ 9. Fats

___ 10. Vitamins

___ 11. Minerals

Column II

a. Important for the proper breakdown and use of other nutrients

b. Stored as energy for later use

c. Regulate many body processes

d. Build and repair tissue

e. A source of energy

12. Foods included in the meat group are: (Circle the letter of the best answer.)

    a. Whole grains and pasta
    b. Fish, dried beans, and eggs
    c. Salad oil and butter
    d. Fruit and vegetables

13. Foods included in the basic nutrient category of carbohydrates are: (Circle the letter of the best answer.)

    a. Nuts and whole milk
    b. Fish, dried beans, and chicken
    c. Cereal, bread, and fruit
    d. Salad oil and whole milk

14. Fats include which of the following foods? (Circle the letter of the best answer.)

    a. Lettuce and radishes
    b. Salad oil and butter
    c. Fish and baked potato
    d. Orange juice and apple

15. How many servings per day are recommended from the vegetable group? (Circle the letter of the best answer.)

    a. 2 servings a day, each 2-3 ounces
    b. 1 serving a day, each 4 ounces
    c. 3 to 5 servings per day
    d. 7 servings per day

16. A liquid diet includes which of the following foods? (Circle the letter of the best answer.)

    a. Ground hamburger and peeled peaches
    b. Cake and bread
    c. Green beans and corn
    d. Broth and gelatin

17. Which of the following statements is true concerning the diabetic diet?

    a. The diabetic should eat at irregular intervals.
    b. The diabetic must eat only what is allowed and all that is allowed.
    c. The amount of roughage is controlled in the diabetic diet.
    d. The diabetic is never given between-meal nourishment.

Match the Special Diet in Column I with the food allowed on that diet in Column II.

	Column I		Column II
___ 18.	Bland	a.	Tender chicken breast
___ 19.	Soft	b.	Mashed potatoes
___ 20.	Full liquid	c.	Broth and gelatin
		d.	Ice cream and pudding

21. A method of providing a nutritionally complete liquid diet is: (Circle the letter of the best answer.)

    a. Given by intravenous (IV) feedings.
    b. Grind food before giving.
    c. Offer only soft foods.
    d. Give a supplement such as Ensure.

22. Fiber, a non-nutrient, is important in the diet because: (Circle the letter of the best answer.)

    a. Fiber provides bulk to the stool.
    b. Fiber makes the stool liquid.
    c. You can live only a few weeks without water.
    d. Water is essential to life.

23. Which of the following statements is true about the nutritional needs of the elderly? (Circle the letter of the best answer.)

    a. Frequent desserts are served because the client likes them best.
    b. Larger portions are served so that the client has more choice in what is eaten.
    c. Smaller, more frequent meals are served if the client's appetite is poor.
    d. Larger amounts of sweets are offered to improve the client's appetite.

GENERAL NUTRITION

The body depends on food for energy, growth, repair of tissue, and the maintenance and regulation of many functions. Each nutrient furnished by food has a specific contribution to good health. The use of any one nutrient by the body is dependent on a proper balance of all the other nutrients to accomplish its purpose. The more variety there is in the choice of food, the better the diet is likely to be.

Energy needs must be met to maintain a healthy body. Food energy values and allowances are expressed in Kilo-Calories and will be referred to as calories throughout this manual. The energy allowance for each population and age group varies. The average needs of people in each category are expressed in the Recommended Dietary Allowance (RDA) Table.

It is important to maintain desirable body weight throughout life and this is done through a balance between energy intake and energy output. A large number of individuals in the United States are overweight and may require less energy than is recommended because they have sedentary work and leisure patterns. Energy intake should be adjusted for the individual to maintain desirable body weight in relation to age, sex, height, and physical activity.

Energy may be derived from any reasonable combination of carbohydrate, fat, and protein. An additional source of energy is alcohol.

Carbohydrate

Carbohydrate is the main source of energy in the diet. A reasonable proportion, 45-55 percent, of a person's caloric intake should be derived from carbohydrates. Foods such as fruits, vegetables, and whole-grain cereals provide energy mainly from carbohydrate and are generally good sources of other nutrients, such as vitamins and minerals. The principal carbohydrates are sugars, starches, and cellulose. The sugars include the monosaccharides and disaccharides in refined sugars, jams, jellies, syrups, honey, fruits, soft drinks, and milk. The starches are the polysaccharides of cereals, flour, potatoes, and other vegetables. Dietary fiber is generally defined as the sum of the indigestible carbohydrate and carbohydrate-like components of food, including cellulose, lignin, hemicellulose, and pectin.

Fat

Another source of energy in the diet is fat. Dietary fat also serves as a carrier for fat-soluble vitamins and provides essential fatty acids. Total fat intake should comprise no more than 35 percent of dietary energy. Food sources of fat include butter, margarine, oils, lard, and fat in meat, poultry, fish, and dairy products. Essential fatty acids, the primary one being linoleic acid, must be provided in the diet because of the multiple functions they perform. Linoleic acid is found widely in varying amounts in foods of both plant and animal origin.

Protein

Another source of energy in the diet is protein. Protein foods can be used as an energy source but more importantly, food proteins provide amino acids for the synthesis of body proteins and for the synthesis of many other tissue constituents. Amino acids obtained from food proteins are essential for growth. Nine essential amino acids are not synthesized by the body and therefore must be provided by foods in the diet. Animal products--eggs, milk, meat, fish, and poultry--contain all of the essential amino acids in the correct proportion. Grains and legumes also furnish protein but are low in some essential amino acids. ..

Vitamins and Minerals

Vitamins and minerals serve many functions. Vitamins are a group of organic compounds in foods that are needed in minute quantities, and are essential for specific body functions of maintenance, growth and reproduction. Vitamins are classified as either fat soluble or water soluble. Minerals are subdivided into two categories: 1) macro-nutrients--those occurring in appreciable amounts accounting for most of the body content of minerals such as calcium--and 2) micronutrients or trace elements--those present in minute quantities, such as iodine or iron. Mineral elements are components of the body's structure or constituents of enzymes and hormones. They serve as regulators of body fluids and are involved with other body functions.

Fiber

A normal, healthy diet should contain 20-25 grams of dietary fiber. Dietary fiber is generally defined as the sum of the digestible carbohydrate and carbohydrate-like components or food including cellulose, lignin, hemicellulose, pentosans, gums, and pectin. These undigestible substances provide bulk in the diet and aid elimination. (See Appendix.)

Water

Water is an essential part of the diet for it plays a role in practically all body processes, and is the most abundant body constituent. The body is equipped with a number of homeostatic mechanisms, including the sensation of thirst, that operate to maintain total body water within narrow limits. Water is present in practically all foods.

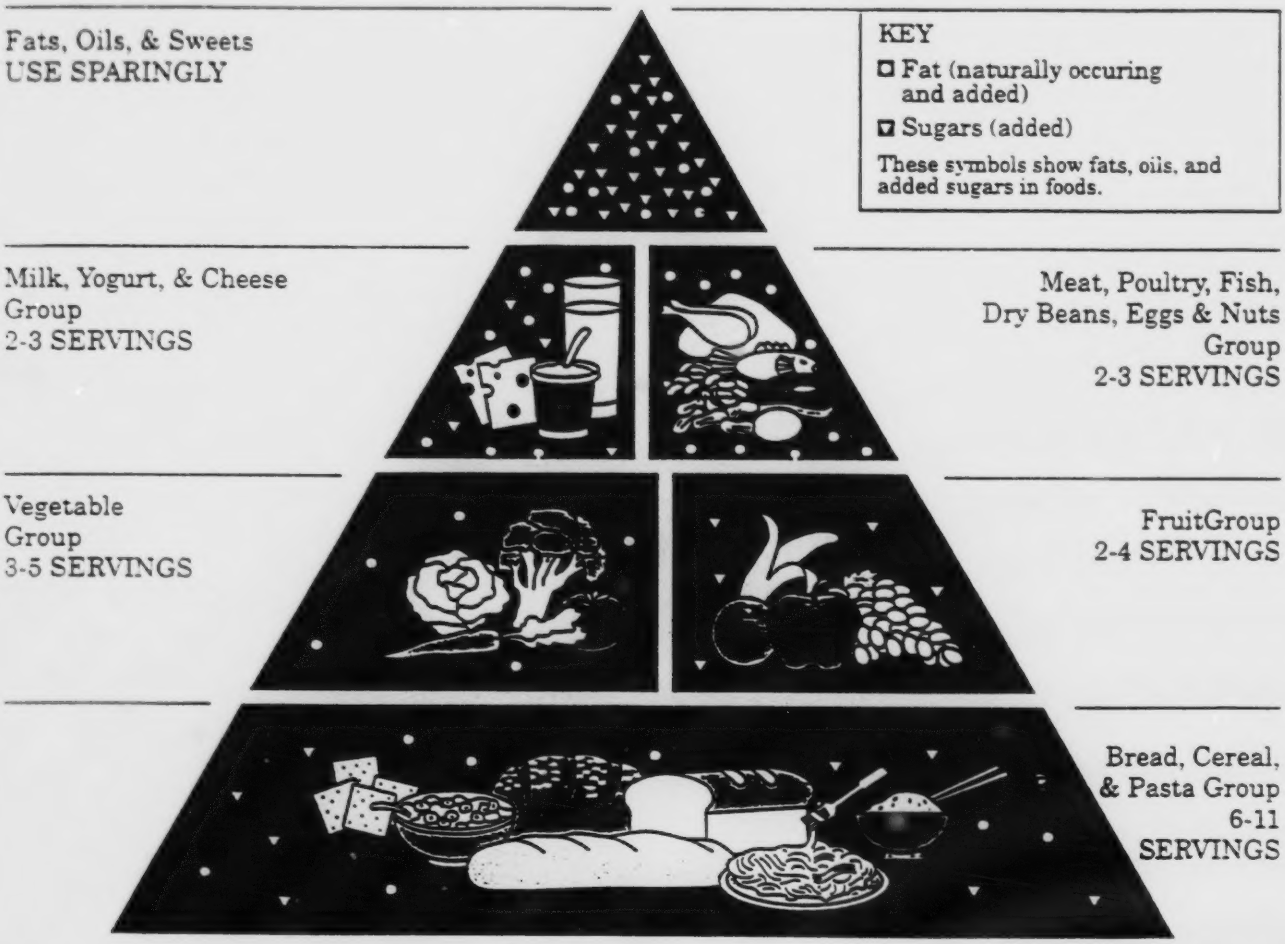
Food groupings have been made and general guidelines established which recommend the appropriate number of servings from each of the food groups, so that an adequate amount of minerals and vitamins are provided in the daily diet. The elimination of one food group might appreciably reduce the intake of one or more of the minerals and vitamins.

The manner in which foods are selected, prepared, and served affects their contribution to the diet. Care must be taken to select a variety of foods, prepare them in a manner to preserve their nutrient content, prevent food spoilage or contamination, and serve them attractively.

Source: Missouri Diet Manual. 7th ed. Missouri Department of Health and Missouri Department of Social Services - Division of Aging.

HO 2

FOOD PYRAMID


Fats, Oils, & Sweets
USE SPARINGLY
KEY
○ Fat (naturally occuring and added)
▽ Sugars (added)
These symbols show fats, oils, and added sugars in foods.
Milk, Yogurt, & Cheese Group
2-3 SERVINGS
Meat, Poultry, Fish, Dry Beans, Eggs & Nuts Group
2-3 SERVINGS
Vegetable Group
3-5 SERVINGS
FruitGroup
2-4 SERVINGS
Bread, Cereal, & Pasta Group
6-11 SERVINGS

BEST COPY AVAILABLE

Source: U.S. Department of Agriculture/U.S. Department of Health and Human Services

The food groups provide a pattern to use as a guide when planning menus. The minimum number of servings specified from each group, if well chosen, forms the foundation of a nutritionally adequate diet. Use of additional servings from these groups along with the "other" foods may be needed if caloric need is greater.

BREAD, CEREAL, RICE, & PASTA GROUP

The grain group includes all grains--such as barley, buckwheat, corn, oats, rice, rye, and wheat--bread, breakfast cereals, grits, noodles, and pasta products made from grains. Each of the following is equal to one serving from the grain group:

1 slice whole-wheat or enriched bread
1 tortilla
½ English muffin or hamburger bun
1 oz. ready-to-eat cereal
½ cup cooked cereal, rice, grits, or pasta
1 roll, muffin, or biscuit

Labels should be checked carefully to assure that the products are enriched, fortified, or whole-grain. Enriched grains provide iron, thiamin, riboflavin, and niacin, and are the main source of carbohydrate. Whole-grain foods, such as whole-wheat bread, oatmeal, and shredded wheat, provide more fiber, zinc, folic acid, and vitamins B6 and E than other breads and cereals. Milk combined with grains improves the usability of grain proteins for body repair and building. (e.g., cereal with milk; cheese and rice casserole.)

VEGETABLE GROUP

The vegetable group is a rich source of vitamin A. Three to five servings are needed each day. Each of the following is equal to one serving from the vegetable group:

¾ cup vegetable juice
½ cup raw vegetable
1 cup raw leafy vegetable
½ cup cooked vegetable
1 medium potato

FRUIT GROUP

The fruit group includes all fresh, frozen, and dried fruits. The fruit group is a good source of vitamin C. Two to four servings are needed daily. Each of the following is equal to one serving from the fruit group:

¾ cup fruit juice
½ cup raw, canned, or cooked fruit
1 medium apple, banana, orange or pear
½ grapefruit
¼ cantaloupe

MEAT, POULTRY, FISH, DRY BEANS, EGGS, & NUTS GROUP

The meat group includes meat (beef, veal, pork, lamb, and wild game); fish and shellfish; poultry; eggs; and legumes such as dry beans and lentils; and nuts.

A serving from this group equals:

2-3 ounces lean meat, fish, or lean poultry
1 egg
2 tablespoons peanut butter
½ cup nuts
½ cup of cooked dried beans, peas, or lentils

Meat, fish, poultry, and eggs provide high quality protein. Dry beans and peas, soy extenders, and nuts by themselves are incomplete proteins (amino acids). Foods containing dry beans, dry peas, or nuts should be combined with grain or animal protein to enhance protein utilization (e.g., bean burrito with cheese and peanut butter sandwich). This group also supplies fat, iron, niacin, and other nutrients.

MILK, YOGURT, & CHEESE GROUP

The milk group contains all types of milk used as beverages, all kinds of natural or processed cheese, cottage cheese, yogurt, ice cream, and foods made with large proportions of milk such as cream soups and puddings.

The recommended servings of milk vary for different groups of people because nutrient needs vary with body size and the stage of growth. A serving from this group equals:

1 cup or 8 ounces whole, 2 percent, or skim milk, buttermilk; reconstituted nonfat dry or reconstituted evaporated milk
1½ to 2 ounces cheese
½ cup cottage cheese
½ cup ice cream, frozen yogurt, or ice milk
1 cup yogurt

Milk is the best source of calcium and riboflavin, and is an important source of vitamins A and D and high quality protein. Milk provides carbohydrate, fat (unless nonfat milk is used), and other nutrients.

FATS, OILS, & SWEETS

This group supplies no significant nutrients. It includes fats and oils, sweets, salty snacks, alcohol, other beverages, and condiments. Calories should be limited from this group.

SUGGESTED WEIGHTS FOR ADULTS

HEIGHT[1]	WEIGHT IN POUNDS[2] BY AGE				
	25	35	45	55	65
4'10"	84-111	92-119	99-127	107-135	115-142
4'11"	87-115	95-123	103-131	111-139	119-147
5'0"	90-119	98-127	106-135	114-143	123-152
5'1"	63-123	101-131	110-140	118-148	127-157
5'2"	96-127	105-136	113-144	122-153	131-163
5'3"	99-131	108-140	117-149	126-158	135-168
5'4"	102-135	112-145	121-154	130-163	140-173
5'5"	106-140	115-149	125-159	134-168	144-179
5'6"	109-144	119-154	129-164	138-174	148-184
5'7"	112-148	122-159	133-169	143-179	153-190
5'8"	116-153	126-163	137-174	147-184	158-196
5'9"	119-157	130-168	141-179	151-190	162-201
5'10"	122-162	134-173	145-184	156-195	167-207
5'11"	126-167	137-178	149-190	160-201	172-213
6'0"	129-171	141-183	153-195	165-207	177-219
6'1"	133-176	145-188	157-200	169-213	182-225
6'2"	137-181	149-194	162-206	174-219	187-232
6'3"	141-186	153-199	166-212	179-225	192-238
6'4"	144-191	157-205	171-218	184-231	197-244

1 Values in this table are for height without shoes
2 Values in this table are for weight without clothes

The weight range in this chart is the lower weight for small frame and the upper weight is for large frame.

There are several factors that must be considered when trying to determine what is the ideal weight for any individual. The body build, the amount of body fat, the location of body fat, and state of health can seriously affect the weight of any individual regardless of the ranges listed in height and weight chart.

Source: Missouri Dietetic Association and Missouri Division of Health. *Missouri Diet Manual*. 7th ed. 1992.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-6 OR DEMONSTRATION:

SKELETAL SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with the correct definition.
2. List the functions of the skeletal system.
3. Identify the four types of bones and where they are located.
4. Describe the function of synovial fluid.
5. Match the four types of diarthroses joints with their locations.
6. Identify the types of joint movements by matching movement with picture examples.
7. Label a diagram of the structure of long bones and their linings.
8. Identify the location of selected bones of the body by labeling a diagram of the skeleton.
9. Explain the difference between ligament and cartilage.
10. Match disorders of bones and joints with the correct description of the disorder.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Types of Joints
2. HO 2: Normal Range of Movements

3. HO 3: Long Bone Structure
4. HO 4: Frontal View of Skeleton
5. HO 5: Posterior View of Skeleton
6. HO 6: Skeletal Parts
7. HO 7: Vertebrae
8. Anatomical model
9. Wall charts

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 6 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Restorative Nurse Assistant. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

The skeletal system consists of 206 bones. This system forms the framework of the body, just as a building is supported by a wood or metal structure. Some bones are hinged and others are fused to other bones. The average growth of bone is 18 years for the female and 20 to 21 years for the male.

The male and female skeleton are different. The male skeleton is usually larger. The male and female hipbones are different. The female pelvis has a broad shallow shape and the pelvic inlet is wider so that a baby can be cradled in the pelvis and pass through it at birth.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

- A. Amphiarthrosis - partially moveable joint
- B. Arthritis - inflammation of a joint
- C. Articular system - system of the joints
- D. Atlas - first cervical vertebra
- E. Axis - second cervical vertebra
- F. Ball and socket joint - one bone has a ball-shaped head which nestles into a concave socket of the second bone.
- G. Bone fracture - any break of bone
- H. Bursa - joint capsule
- I. Cartilage - tough, strong tissue; found in nose, ears, and at the ends of bones
- J. Diarthrosis - moveable joint
- K. Gliding joints - those in which nearly flat surfaces glide across each other; Ex. vertebrae of the spine
- L. Hinge joints - move in two directions: flexion and extension; Ex. knee and elbow
- M. Iliac - pertaining to the ilium
- N. Joint - place where two bones meet
- O. Ligament - sheet of tough tissue that holds bones together at the joint
- P. Osteitis - inflammation of a bone
- Q. Pivot joint - those with an extension rotating in a second arch-shaped bone; Ex. radius and ulna
- R. Sprain - injury to a ligament
- S. Synarthrosis - immoveable joint

- T. Synovial - joint cavity
- U. Temporomandibular joint - connects the upper and lower jaw
- V. Tendon - fibrous cords which connect muscles to bones
- W Vertebral discs - discs of the spinal column down the middle of the back

II. Functions of the Skeletal Structure **(II-2)**

- A. Supports and gives form and shape to the body
- B. Protects the delicate internal organs of the body, brain, and spinal cord
- C. Movement and anchorage of muscles - muscles attached to the skeleton are called skeletal muscles. These muscles contract and exert a pull upon a bone and move it.
- D. Mineral storage - they store calcium and phosphorus. Our body can draw upon these reserves in times of need.
- E. Hemopoiesis - the red marrow of the bone is the site of blood cell formation

III. Bone types **(II-3)**

- A. Long bones - upper and lower arms and legs
- B. Flat bones - skull bones
- C. Irregular - bones of the spinal column
- D. Short bones - cube-like in shape; bones of wrist and ankle

IV. Joints - point of contact between two bones (HO 1)

- A. Classification
  - 1. Diarthroses
  - 2. Amphiarthroses
  - 3. Synarthroses
- B. Movable joints are covered with a smooth, slippery cap of cartilage called articular cartilage. It helps to absorb jolts.
  - 1. Movable joints consist of
    - a. Articular cartilage
    - b. Joint capsule

        c. Synovial - joint cavity

    2. Articular capsule encloses the two articular surfaces of the bone. It is a tough, fibrous connective tissue capsule.

    3. Synovial membrane lines the articular capsule.

    4. The synovial membrane secretes synovial fluid.

    5. Synovial fluid is a lubricating substance that reduces the friction of joint movement. **(II-4)**

C. Types of diarthroses joints - freely movable joints **(II-5)**

    1. Ball and socket joints - provide the greatest amount of movement; shoulders and hips

    2. Hinge - knees, elbows, and outer joints of the fingers

    3. Pivot - radius and ulna (the long bones of the forearms), wrists, ankles, atlas (first cervical vertebra which supports the head), and axis, (second cervical vertebra which allows the head to rotate)

    4. Gliding joint - have nearly flat surfaces and glide across each other; includes the vertebrae of the spine (allows the torso to bend forward, backward, and sideways and to rotate) and small bones of the wrist and ankle

D. Amphiarthroses joints - slightly movable joints

    1. Cartilage located between their articular surfaces

    2. Include the attachment of the ribs to the spine, symphysis pubis, and the joint between the two pubic bones

E. Synarthroses joints - immovable joints

    1. They are found in the adult cranium.

    2. Cranial joints are commonly called sutures.

    3. They are fused together and provide a protective cover for the brain.

V. Types of Movement of Joints (HO 2) **(II-6)**

A. Flexion - bending movement in which angle between two adjoining bones is decreased

B. Extension - straightening a joint; movement of a part which increases the angle between two adjoining bones

C. Hyperextension - to stretch out a joint in a position of maximum extension

D. Abduction - movement away from midline

E. Adduction - movement toward the midline

F. Rotation - twisting or pivoting bone around a central axis without a change in position of bone

G. Supination - position of bones in forearm in anatomic position

H. Pronation - position of the bones in forearm with the back of hand turned forward

VI. Structure and Formation of Bones

A. Bones are composed of microscopic cells called osteocytes.

B. Bones are made up of 35 percent organic material and 65 percent inorganic mineral salts.

C. Structure of a long bone (HO 3) **(II-7)**

1. Diaphysis or shaft - compact bone

2. Epiphysis - extreme ends of the diaphysis; cancellous bone

3. Medullary canal - center of the shaft; filled with yellow bone marrow which contains blood vessels and cells that form leukocytes (white blood cells)

4. Endosteum - lines the marrow canal

5. Periosteum - tough fibrous tissue that contains blood vessels, lymph vessels and nerves

a. Outside of bone is covered with the periosteum.

b. Periosteum is necessary for bone growth repair and nutrition.

VII. Divisions of the Skeletal System (HOs 4, 5, & 6) **(II-8)**

A. Axial skeleton - 80 bones

1. Skull - 29 bones

a. Cranial bones

(1) Frontal - forehead bone

(2) Parietal - bulging form on the topside of cranium

(3) Temporal - lower side of cranium

(4) Occipital - back of skull

        - (5) Sphenoid - central part of the floor of the cranium
        - (6) Ethmoid - helps form the floor of the cranium, sidewalls and roof of mouth, part of middle partition, nasal septum, and part of orbit
    - b. Facial bones
        - (1) Nasal - upper part of the bridge of the nose
        - (2) Maxillary - upper jawbone
        - (3) Zygoma (malar) - cheek bones
        - (4) Lacrimal - forms medial wall of eye socket and sidewall of nasal cavity
        - (5) Palatine - back part of roof of mouth and floor, sidewalls of nose and part of floor of orbit
        - (6) Inferior turbinate - curved ledge along inside of sidewalls of nose; one of the three turbinate bones
        - (7) Vomer - lower back part of the nasal septum
    - c. Ear bones
        - (1) Malleus - tiny bone in middle ear cavity in temporal bone; shaped like a hammer
        - (2) Incus - also in middle ear; shaped like an anvil
        - (3) Stapes - also in middle ear; shaped like a stirrup
- 2. Vertebral column - 26 bones (HO 7)
    - a. Cervical - 7 in upper neck region; first one called atlas; second called axis
    - b. Thoracic - 12 attached to ribs
    - c. Lumbar - 5 in small of back
    - d. Sacrum - 5 separate vertebrae in children; fused into one in adults
    - e. Coccyx - tail bone; 3 to 5 separate vertebrae in children; fused into one vertebrae in adults
- 3. Ribs and sternum - 25 bones
    - a. True ribs - 7 upper pairs (14 in all) attach to sternum by way of costal cartilages

        - b. False ribs - 3 pairs attached to sternum by way of costal cartilage of the 7th rib
        - c. Floating ribs - 2 pairs called floating ribs because they do not attach to the sternum or the costal cartilages
        - d. Sternum - 1 breastbone; a piece of cartilage at the lower end of bone called xiphoid process

B. Appendicular skeleton - 126 bones

1. Upper extremities - 64 bones

    - a. Clavicle - 2; collarbone
    - b. Scapula - 2; shoulder blade
    - c. Humerus - 2; upper arm
    - d. Radius - 2; bone on thumb side of lower arm
    - e. Ulna - 2; bone on little finger side of lower arm
    - f. Carpal bones - 16; irregular-shaped bones at upper end of hand; anatomical wrist
    - g. Metacarpals - 10; forms framework of hand
    - h. Phalanges - 28; bones of the fingers, three in each finger and two in each thumb

2. Lower extremities - 62 bones

    - a. Pelvic bone - 2
        - (1) Ilium - hip bone, upper flaring part
        - (2) Ischium - lower back part
        - (3) Pubic bone - lower front part
        - (4) Acetabulum - hip socket
        - (5) Symphysis pubis - joint in middle between the two pubic bones
        - (6) Pelvic inlet - opening into pelvic cavity
    - b. Femur - 2; upper leg bone (the thigh)
    - c. Patella - 2; kneecap

d. Tibia - 2; shinbone

e. Fibula - 2; lateral side of lower leg (the long slender bone)

f. Tarsal bones - 14; heel and back part of foot (anatomical ankle)

g. Metatarsals - 10; part of foot to which toes attach

h. Phalanges - 28; toe bones; three in each toe, two in each big toe

VIII. Ligaments and Cartilage **(II-9)**

A. Ligaments - strong bands of connective tissue that hold bone to bone

B. Cartilage - white, fibrous connective tissue attached to ends of bones to prevent friction

IX. Disorders of Bones and Joints **(II-10, 11)**

A. Osteoporosis

1. Osteoporosis is due to loss of minerals of the bones.

2. It is caused by a deficiency in male or female hormones.

3. Bones are brittle and fracture easily.

4. Hormones and minerals may slow the process.

B. Arthritis

1. Inflammatory condition of one or more joints, accompanied by pain and deformity

2. Types

a. Osteoarthritis

(1) The most common type of arthritis

(2) Often called degenerative joint disease

(3) Affects joints that receive a great deal of wear and tear, usually the lower extremity joints and the spine

(4) Usually occurs after 45 years of age

b. Rheumatoid

(1) Chronic systemic disease affecting the connective tissues and joints

(2) Most crippling; causes multiple deformities

(3) Joints are very swollen and painful.

(4) Affects three times more women than men

(5) Unknown cause

c. Gout

(1) Usually involves but is not limited to inflammation of the great toe

(2) Caused by faulty uric acid metabolism

C. Bursitis

1. Inflammation specifically of the synovial bursa (sac surrounding the structure that makes up the joint) which cushions a joint during movement

2. Calcium deposits may form within the joint (elbow, knee, or shoulder joints)

D. Malformations caused by injury

1. Sprain - injury to a ligament which usually causes swelling and pain

2. Dislocation - usually of the hip or shoulder; involves a disruption of the joint which results in the bones being in an abnormal position

3. Fractures

a. Simple (closed) fractures are of several types including:

(1) Complete - most common; results in two or more separate fragments of the bone

(2) Incomplete or greenstick - splitting or splintering of the bone

b. Compound (open) fractures - skin being broken as well as the bone

E. Rickets

1. Disease of the bones

2. Caused by a lack of vitamin D

3. The soft bones bend, causing bowlegs and pigeon breast.

F. Microcephalus - a congenital condition in which there is a marked diminution in the size of the cranium due to early ossification of the sutures of the skull

- G. Spina bifida - a congenital condition in which the vertebral column, which contains the spinal cord, does not develop completely and close properly

- H. Scoliosis - lateral curvature of the spine

- I. Subluxation - a vertebra is displaced from its normal position or normal range of movement, without having been completely dislocated. Sometimes referred to as a whiplash by lay people.

- J. Osteitis - inflammation of bone tissue

- K. Ewing's sarcoma - a malignant tumor of the bone marrow

X. Summary and Conclusion

- A. Terms and definitions
- B. Functions of the skeletal system
- C. Bone types
- D. Joints
- E. Types of movement of joints
- F. Structure and formation of bones
- G. Divisions of the skeletal system
- H. Ligaments and cartilage
- I. Disorders of bones and joints

In this lesson we have discussed the structure and function of the skeletal system. The next lesson will be the muscular system which will explain how muscles provide the movement for bones.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms in this lesson?
2. What are the functions of the skeletal system?
3. Where are long bones, flat bones, irregular bones, and short bones located?
4. What is the function of synovial fluid?
5. Where are the ball and socket, hinge, pivot, and gliding joints located?
6. How do you demonstrate flexion, extension, abduction, adduction, rotation, supination, and pronation?
7. Where are the epiphysis, bone marrow cavity, periosteum, diaphysis, endosteum, compact bone, and cancellous bone located?
8. Where are each of the bones of the skeletal system located?
9. What is the function of ligaments and cartilage?
10. What are 10 disorders of bones and joints?
11. How do you describe the 10 disorders of bones and joints?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Identify the major bones on anatomical model or wall chart.
2. Obtain a long bone from meat market - have them cut it lengthwise. Identify parts.
3. Label drawings of skeleton.
4. Examine bones on skeleton and identify types of bones.
5. Have class demonstrate the joint movements.
6. Bring a chicken leg or wing to class for demonstration and discussion on joints, and attachments of ligaments.

ANSWERS TO EVALUATION ITEMS:

1. f
2. b
3. e
4. a
5. c

6. a. Support
   b. Protection
   c. Anchor for skeletal muscles
   d. Produce blood cells
   e. Store calcium

7. d
8. c
9. c
10. d
11. a
12. b
13. d
14. e
15. b
16. a
17. c
18. Clockwise: f, b, c, e, g, d, a
19. a
20. e
21. i
22. n
23. t
24. w
25. b
26. f
27. h
28. p
29. v
30. c
31. g
32. k
33. r
34. d
35. j
36. m
37. o
38. q
39. l
40. a
41. e
42. b
43. a
44. f
45. d

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

Column I	Column II
____ 1. Tendon	a. Sheet of tough tissue that holds bones together at the joint
____ 2. Cartilage	b. Tough, strong tissue; found in nose, ears, and at the ends of bones
____ 3. Joint	c. Joint capsule
____ 4. Ligament	d. Moveable joint
____ 5. Bursa	e. Place where two bones meet
	f. Fibrous cords which connect muscles to bones

6. List the five functions of the skeletal system.

a.____

b.____

c.____

d.____

e.____

7. Long bones are located in the: (Circle the letter of the best answer.)

a. Skull
b. Spinal column
c. Wrist and ankle
d. Upper and lower arms and legs

8. What is the lubricating substance that reduces the friction of joint movement called? (Circle the letter of the best answer.)

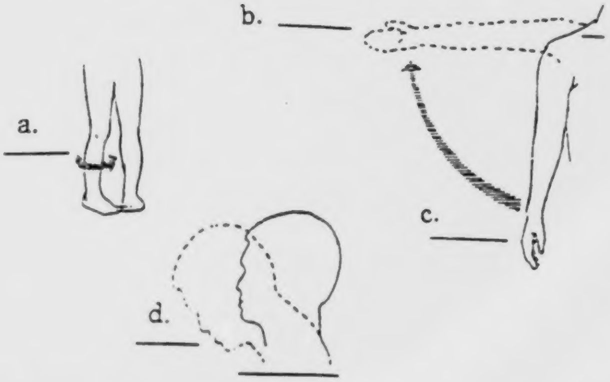
a. Bursa fluid
b. Articular fluid
c. Synovial fluid
d. Gliding fluid

Match the types of diarthroses joints in Column I with the location of the joint in Column II.

	Column I		Column II
____ 9.	Pivot	a.	Vertebrae of spine, small bones of wrist and ankle
____ 10.	Ball and socket	b.	Knees, elbows, outer joints of fingers
____ 11.	Gliding	c.	Radius and ulna
____ 12.	Hinge	d.	Shoulders and hips

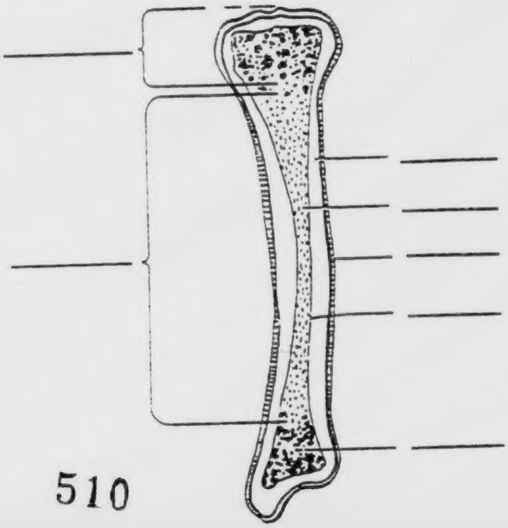
Match the terms describing joint movements with picture examples:

____ 13. Flexion
____ 14. Extension
____ 15. Abduction
____ 16. Rotation
____ 17. Adduction



18. Label the diagram of the long bone by writing the letter of the correct term in the blank.

a. Epiphysis
b. Bone marrow cavity
c. Periosteum
d. Diaphysis
e. Endosteum
f. Compact bone
g. Cancellous bone



Label the correct parts of the skeleton by placing the corresponding letter next to the line identifying the skeleton part.

____ 19. Occipital

____ 20. Metatarsals

____ 21. Patella

____ 22. Ulna

____ 23. Clavicle

____ 24. Parietal

____ 25. Maxilla

____ 26. Tarsals

____ 27. Tibia

____ 28. Ribs

____ 29. Mandible

____ 30. Pelvis

____ 31. Fibula

____ 32. Phalanges

____ 33. Sternum

____ 34. Phalanges

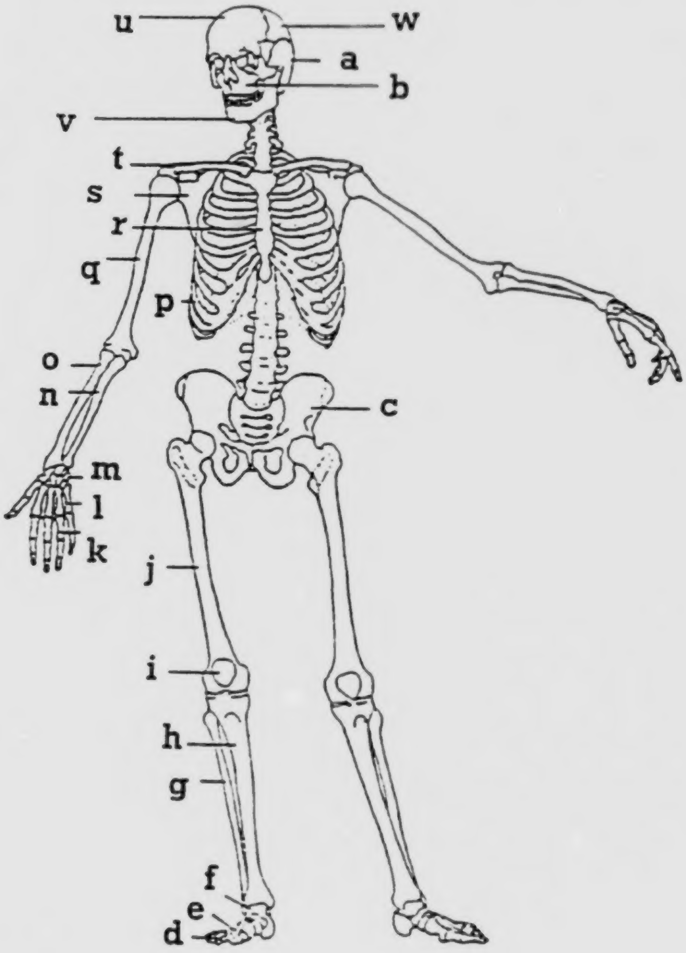
____ 35. Femur

____ 36. Carpals

____ 37. Radius

____ 38. Humerus

____ 39. Metacarpals



40. Which is the correct description of ligaments? (Circle the letter of the best answer.)

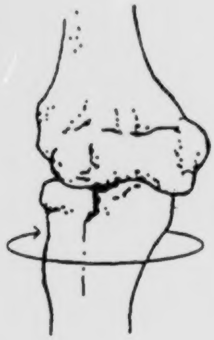
- a. Strong bands of connective tissue that hold bone to bone.
- b. The center of the bone shaft.
- c. Lining of the bone marrow canal.
- d. White, fibrous connective tissue attached to ends of bones.

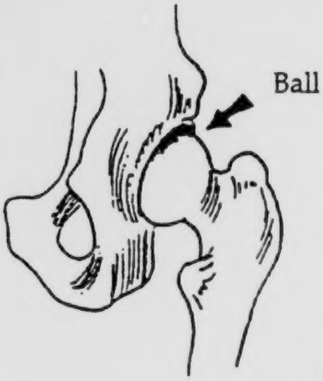
Match the disorder in Column I with the correct description of the disorder in Column II.

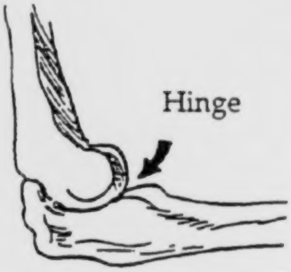
	Column I		Column II
____ 41.	Arthritis	a.	Injury to a ligament
____ 42.	Osteoporosis	b.	Bones are brittle and fracture easily
____ 43.	Sprain	c.	Inflammation of bone tissue
____ 44.	Greenstick fracture	d.	Lateral curvature of the spine
		e.	Inflammatory condition of one or more joints
____ 45.	Scoliosis	f.	Splitting or splintering of the bone

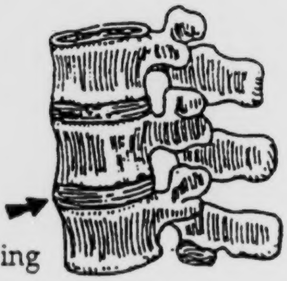
TYPES OF JOINTS

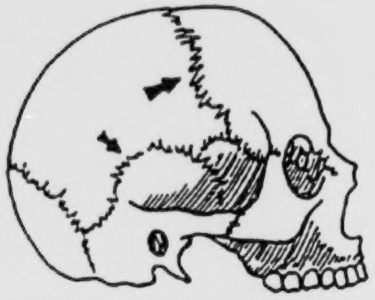
DIARTHROSES JOINTS
(Movable)



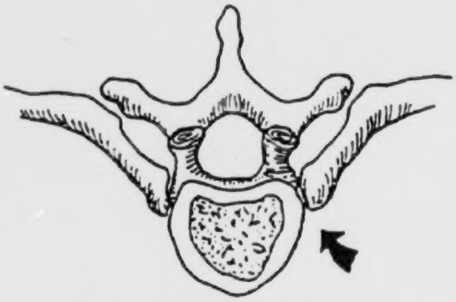

Ball and Socket







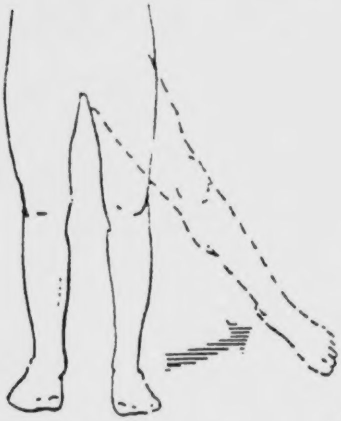
SYNARTHROSES JOINTS
(Immovable)

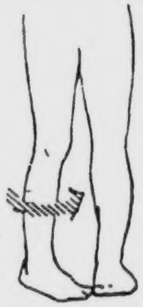


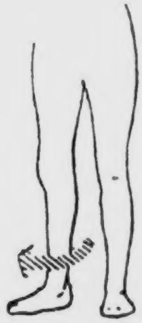
AMPHIARTHROSES JOINTS
(Partially Movable)

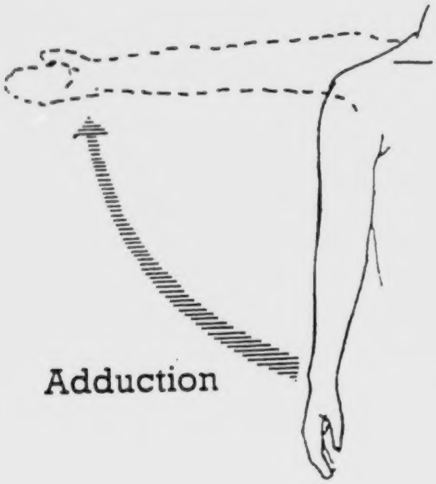
HO 2

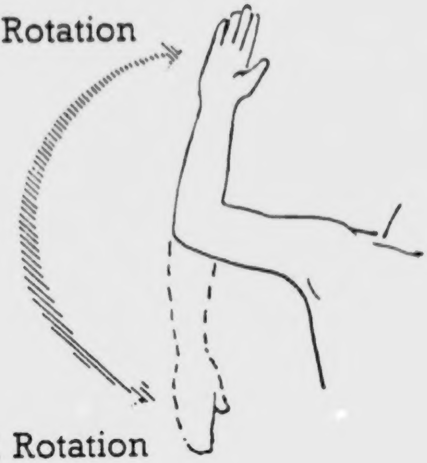
NORMAL RANGE OF MOVEMENTS


Abduction
Adduction

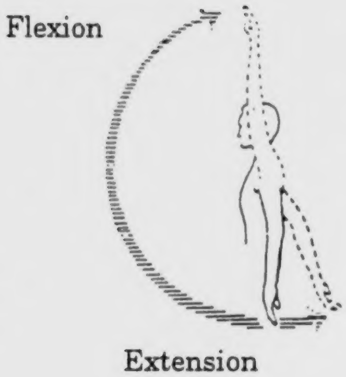

Inward Rotation

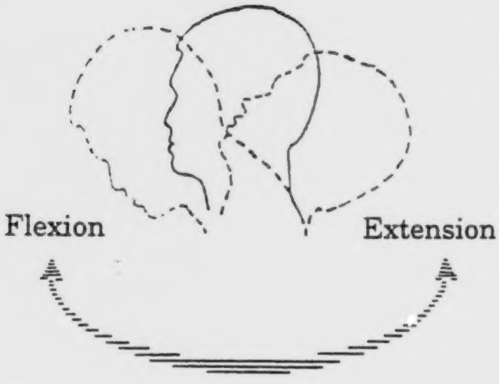

Outward Rotation

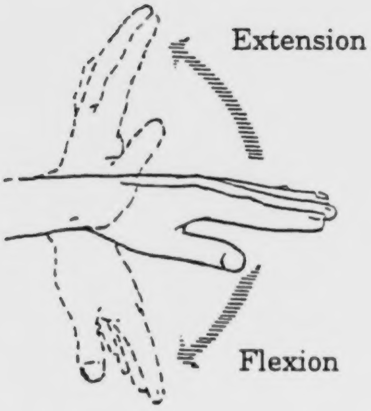

Abduction
Adduction

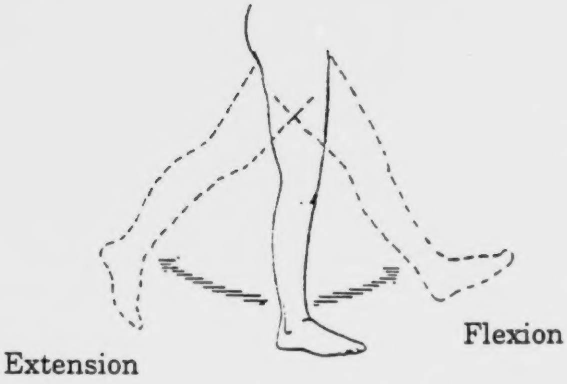

Outward Rotation
Inward Rotation

Anatomy and Physiology, page 5.119

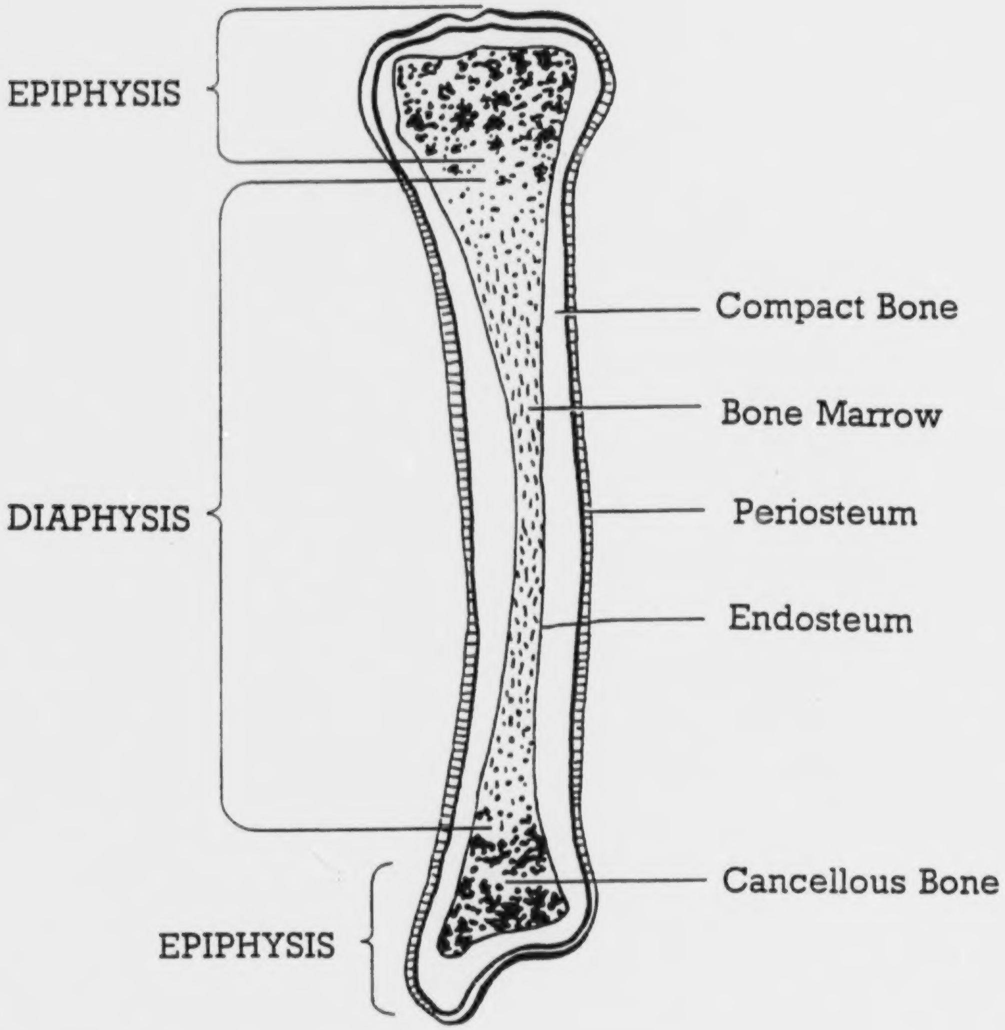

Flexion
Extension


Flexion
Extension

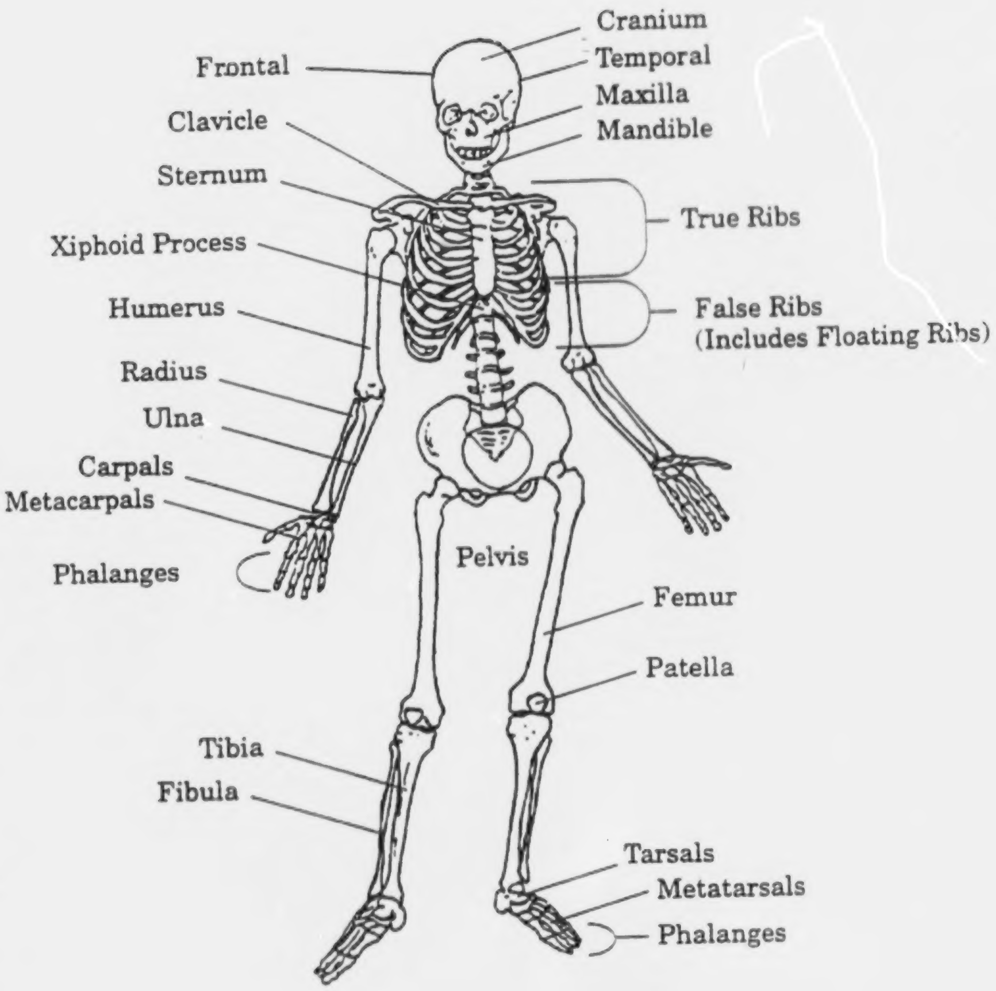

Extension
Flexion


Flexion
Extension

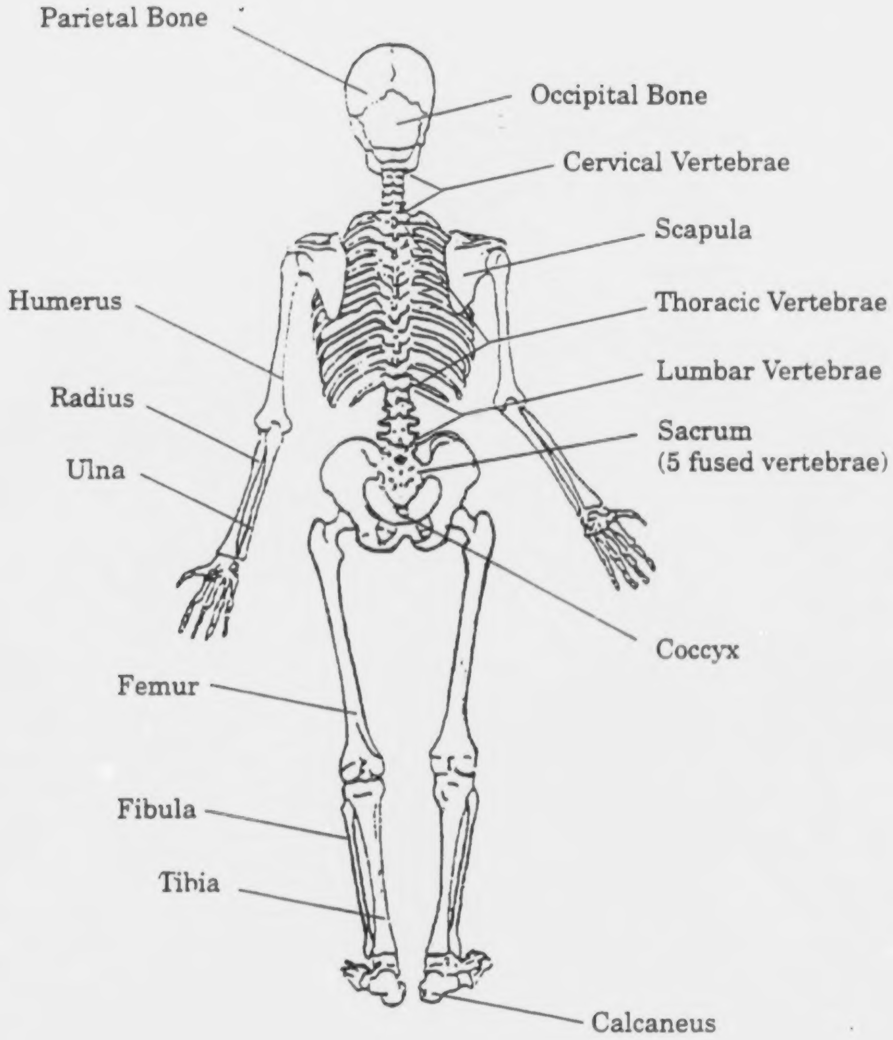
LONG BONE STRUCTURE


EPIPHYSIS
DIAPHYSIS
EPIPHYSIS
Compact Bone
Bone Marrow
Periosteum
Endosteum
Cancellous Bone

FRONTAL VIEW OF SKELETON

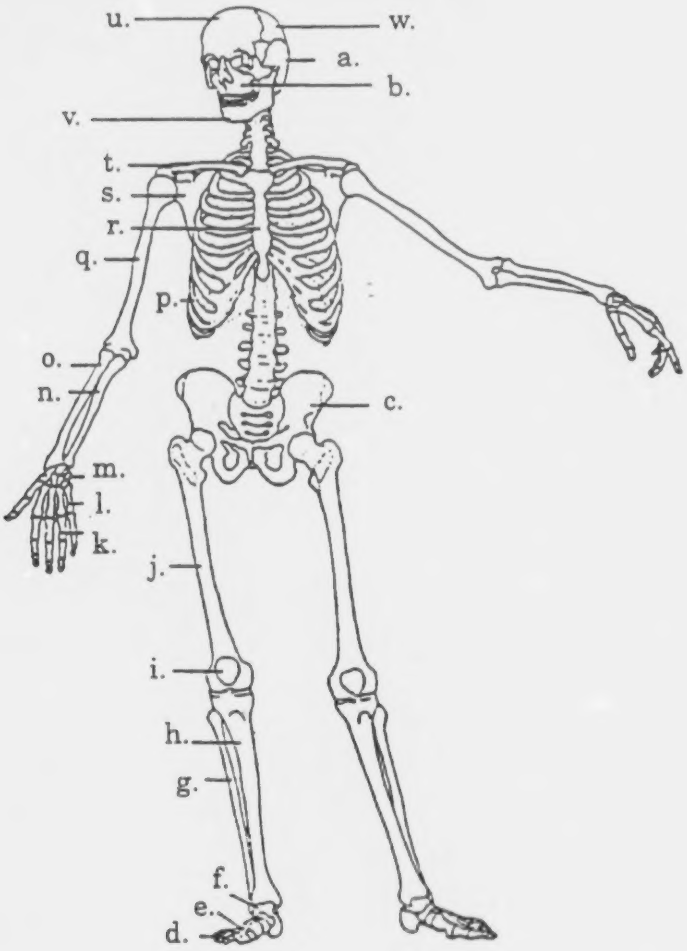

Cranium
Temporal
Maxilla
Mandible
Frontal
Clavicle
Sternum
Xiphoid Process
Humerus
Radius
Ulna
Carpals
Metacarpals
Phalanges
True Ribs
False Ribs
(Includes Floating Ribs)
Pelvis
Femur
Patella
Tibia
Fibula
Tarsals
Metatarsals
Phalanges

POSTERIOR VIEW OF SKELETON


Parietal Bone
Occipital Bone
Cervical Vertebrae
Scapula
Humerus
Thoracic Vertebrae
Lumbar Vertebrae
Radius
Sacrum
(5 fused vertebrae)
Ulna
Coccyx
Femur
Fibula
Tibia
Calcaneus

HO 6

SKELETAL PARTS

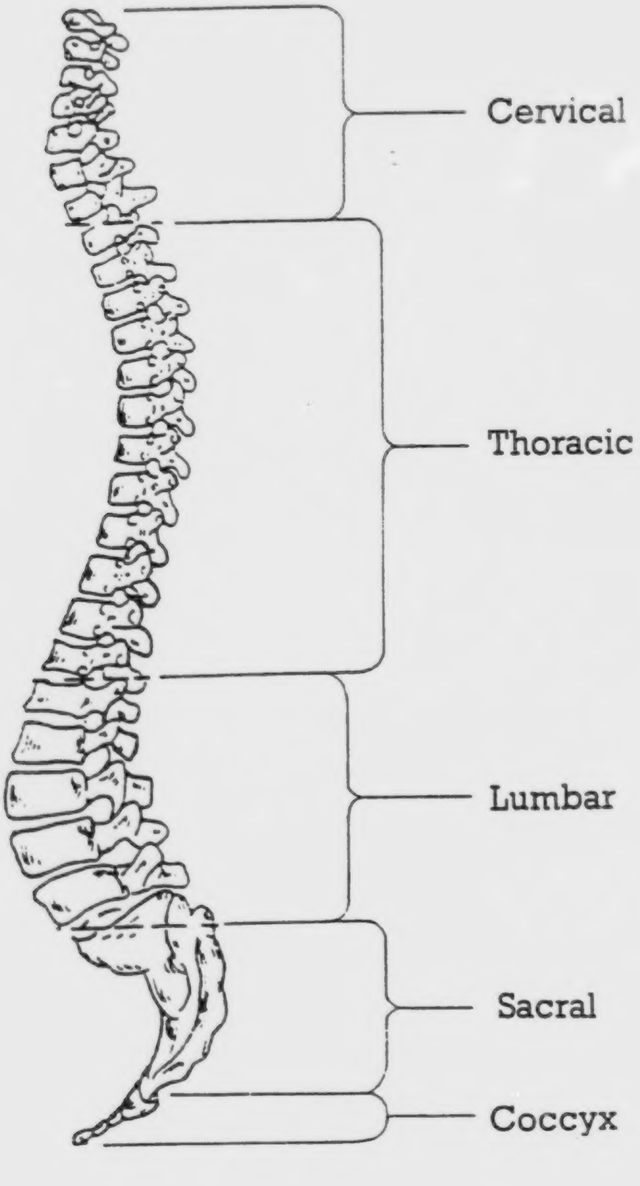


a. Temporal
b. Maxilla
c. Pelvis
d. Phalanges
e. Metatarsals
f. Tarsals
g. Fibula
h. Tibia

i. Patella
j. Femur
k. Phalanges
l. Metacarpals
m. Carpals
n. Ulna
o. Radius
p. Ribs

q. Humerus
r. Sternum
s. Scapula
t. Clavicle
u. Frontal
v. Mandible
w. Parietal

VERTEBRAE


Cervical
Thoracic
Lumbar
Sacral
Coccyx

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-7 OR DEMONSTRATION:

MUSCULAR SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with their correct definitions.
2. Describe the three types of muscle tissues and their functions.
3. Identify the parts of a skeletal muscle.
4. Describe the functions of skeletal muscles.
5. Identify how muscles are attached.
6. Match the major classes of muscles with their functions.
7. Match the major muscles with their functions in the muscular system.
8. Describe common muscular deficits or disorders

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Types of Muscle Tissue
2. HO 2: Muscle Parts
3. HO 3: Muscles
4. Anatomical model

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 7 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Restorative Nurse Assistant. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

The study of muscles is called myology. The muscular system includes over 600 pairs of muscles in the body. They make up over 40 percent of our body weight. Muscles allow us to move our bodies as well as move different parts of our body. In addition, they help the body stay erect, determine our posture, and produce most of the body's heat.

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

- A. Abduction - movement away from midline of body
- B. Adduction - movement of part of body toward midline of body
- C. Antagonist pair - when a pair of body muscles produce movement in opposite directions
- D. Appendicular muscle group - extremity muscles
- E. Axial muscle group - the head, face, neck, and trunk muscles
- F. Cardiac muscle - muscle of the heart
- G. Contractibility - muscle's ability to shorten or contract
- H. Diaphragm - dome-shaped muscle separating the thoracic and abdominal cavities
- I. Elasticity - ability of muscle to return to its original length when relaxing
- J. Extensibility - muscle's ability to be stretched
- K. Extension - making angle at joint larger
- L. Flexion - making angle at joint smaller
- M. Insertion - part of the muscle attached to a moveable bone or fixed structure
- O. Involuntary - without conscious control or direction
- P. Locomotion - act of moving from place to place
- Q. Muscle fatigue - accumulation of lactic acid in the muscle
- R. Muscle tone - muscles in good health are slightly contracted and ready to work.
- S. Myalgia - muscle pain
- T. Myasthenia - weakness of the muscle
- U. Myocardial - pertaining to the muscular tissue of the heart

V. Origin - part of skeletal muscle that is attached to a fixed structure or bone

W. Pronation - to turn downward; Ex. rotation of the forearm so that the palm of the hand is turned downward

X Skeletal muscle - muscles attached to a bone or bones of the skeleton; aids body movement; a form of voluntary (striated) muscle

Y. Sphincter muscles - constricts a passage or closes a natural opening in the body; example: circular muscles in the walls of the anus and urethra

Z. Supination - turn palm of hand up

AA. Viscera - internal organs

BB. Voluntary - under control of will

II. Types of Muscle Tissue and Their Functions (HO 1) **(II-2, 3)**

- A. Smooth muscles - involuntary (not under conscious control); visceral located in the walls of tubular structures and hollow organs, such as the digestive tract, urinary bladder, and blood vessels
    1. Propel materials through passageways of body (food in intestinal tract)
    2. Constrict or dilate openings (pupils of eye)
    3. Contract or expand the width of tubes (veins and arteries)
    4. Expel materials from body (bile from gallbladder)
- B. Cardiac muscle - located in the heart
    1. Forms the wall of the heart
    2. Acts involuntarily (contracts to circulate blood) and are rhythmic and automatic
    3. Requires a continuous supply of oxygen to function
- C. Skeletal muscle - voluntary; striated; attached to the bones of the skeleton and also located in the wall of the pharynx and esophagus
    1. About 40 percent of body weight
    2. Contractions occur voluntarily and may be rapid and forceful
    3. Structure
        - a. Bundle of muscle tissue surrounded by connective tissue

        b. Acts on nerve impulses

III. Parts of Skeletal Muscle (HO 2) **(II-4)**

  A. Origin - less movable end

  B. Body or belly - main part; fleshy

  C. Insertion - more movable end

IV. Functions of Skeletal Muscle **(II-5)**

  A. Movement - locomotion

  B. Heat production

  C. Protection

  D. Maintain posture

V. Muscle Attachment **(II-6)**

  A. Connective tissue - directly to bone

  B. Tendon - cord of fibrous connective tissue that attaches a muscle to a bone or other structure

  C. Aponeurosis - flattened sheet of white, fibrous connective tissue; serves as attachment for flat muscles, or a sheet enclosing/binding muscle groups

VI. Classes of Muscles **(II-7)**

  A. Prime movers - produce definite motion

  B. Antagonist - movement opposite prime mover

  C. Synergist - aids prime mover

  D. Fixator - keeps bone steady at origin while prime mover pulls away

VII. Major Muscles and Their Functions (HO 3) **(II-8)**

  A. Sternocleidomastoid - flexes and rotates head

  B. Biceps - flexes elbow

  C. Triceps - straightens elbow

  D. Deltoid - raises and lifts arm

  E. Trapezius - raises shoulder and arm up and backward

F. Pectoralis major (chest muscles) - pull arm and shoulder in toward body

G. Latissimus dorsi - pulls arm down and backward and rotates the trunk of the body

H. Rectus abdominous - protects the abdominal organs and pulls body forward

I. Quadriceps femoris - pulls leg upward and forward

J. Tibialis anterior - pulls foot upward and slightly lateral

K. Gastrocnemius - extends foot and connects with Achilles tendon

L. Gluteus maximus - protects buttocks and extends thigh

M. Hamstrings - flexes lower leg and extends thigh

N. Sartorius - aids in flexing knee, longest in body

VIII. Common Muscular Deficits or Disorders **(II-9)**

A. Paralysis - temporary or permanent loss of muscle function to a part of the body; caused by injury, trauma, or illness

B. Contracture - temporary or permanent shortening (abnormal) of a muscle which results in a "frozen" or fixed joint; caused by paralysis or disuse; begins 3 to 7 days after immobilization of a part; completed in 6 to 8 weeks

C. Muscular dystrophy - a genetic muscle disease which causes progressive atrophy and muscle wasting.

D. Atrophy - wasting away of tissue; muscle shrinkage

IX. Summary and Conclusion

A. Terms and definitions

B. Types of muscles

C. Parts of skeletal muscle

D. Functions of skeletal muscle

E. Muscle attachment

F. Classes of muscles

G. Major muscles and their functions

H. Common muscular deficits or disorders

This lesson has covered the structure and function of the muscular system. The next lesson is on the heart and circulation.

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What is the definition of terms found in this lesson?
2. What are three types of muscle tissue?
3. What are the functions of the three types of muscle tissue?
4. What are the parts of a muscle?
5. What functions do skeletal muscles perform?
6. How are muscles attached?
7. What are the classes of muscles?
8. What functions do muscles perform?
9. What are four common muscular deficits or disorders?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. View slides of muscle tissue.
2. Examine muscle tissue obtained from butcher shop.
3. Identify muscles on anatomical model and have students describe their actions.

ANSWERS TO EVALUATION ITEMS:

1. f
2. a
3. e
4. b
5. d
6. d
7. e
8. f
9. c
10. b
11. f
12. e

13. b
14. a
15. c
16. b
17. a
18. c
19. d
20. b
21. b
22. d
23. f
24. b
25. g
26. e
27. a
28. c
29. d

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with the correct definition in Column II.

	Column I		Column II
____ 1.	Skeletal muscle	a.	Under control of will
____ 2.	Voluntary	b.	Movement of part of body toward midline
____ 3.	Abduction	c.	Muscle pain
____ 4.	Adduction	d.	Ability of muscle to return to its original length when relaxing
____ 5.	Elasticity	e.	Movement away from the midline of the body
		f.	Muscle attached to bone

Match the terms in Column I with the correct definition in Column II.

	Column I		Column II
____ 6.	Sphincter	a.	Muscle of the heart
____ 7.	Viscera	b.	Act of moving from place to place
____ 8.	Contractibility	c.	Ability of muscle to stretch
____ 9.	Extensibility	d.	Circular muscle
____ 10.	Locomotion	e.	Internal organs
		f.	Muscle's ability to shorten

Match the terms in Column I with the correct definition in Column II.

		Column I		Column II
____	11.	Origin	a.	Making angle of joint smaller
____	12.	Insertion	b.	Muscle shrinkage
____	13.	Atrophy	c.	Making angle of joint larger
____	14.	Flexion	d.	Muscles are in good health
____	15.	Extension	e.	Part of the muscle attached to a moveable part
			f.	Part of the muscle attached to a fixed structure or bone

Match the terms in Column I with the correct definition in Column II.

		Column I		Column II
____	16.	Smooth	a.	Attached to bones
____	17.	Skeletal	b.	Constricts or dilates
____	18.	Cardiac	c.	Forms the walls of the heart

19. The origin of a muscle is the: (Circle the letter of the best answer.)

a. Main flesh part.
b. More movable end.
c. Locomotion part.
d. Less movable end.

20. What is a function of skeletal muscles? (Circle the letter of the best answer.)

a. Constrict openings
b. Protection
c. Rhythmic contractions
d. Expansion

21. Muscles are attached to bone by: (Circle the letter of the best answer.)

a. Prime movers.
b. Tendons.
c. Serous fluid.
d. Pronation.

Match the major muscles in Column I with their functions in Column II.

Column I

____ 22. Latissimus dorsi

____ 23. Triceps

____ 24. Hamstrings

____ 25. Gastrocnemius

____ 26. Pectoralis major

____ 27. Deltoid

____ 28. Gluteus maximus

Column II

a. Raises and lifts arms

b. Flexes lower leg and extends thigh

c. Protects buttocks and extends thigh

d. Pulls arm down and backward and rotates the trunk of the body

e. Chest muscle - pulls arm and shoulder in toward body

f. Straightens elbow

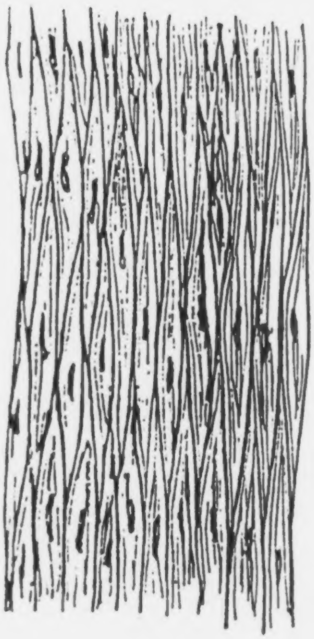
g. Extends foot and connects with Achilles tendon

29. A contracture is: (Circle the letter of the best answer.)

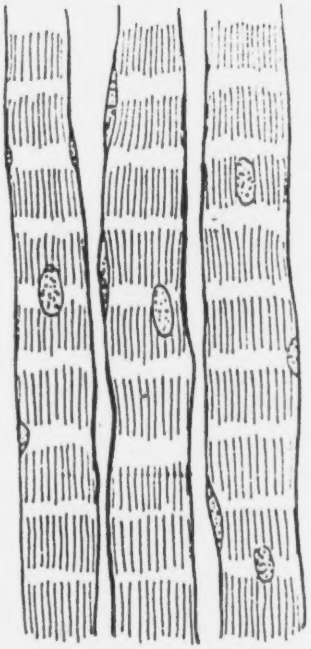
a. Temporary or permanent loss of muscle function to a part of the body.
b. A genetic muscle disease.
c. Dystrophy which causes progressive muscle wasting.
d. Temporary or permanent shortening of a muscle which results in a fixed joint.

HO 1

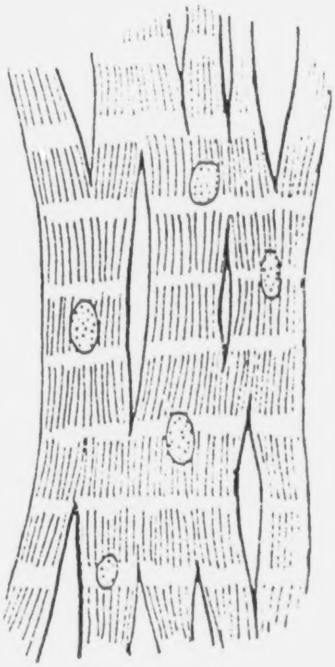
TYPES OF MUSCLE TISSUE



VISCERAL
(Smooth)

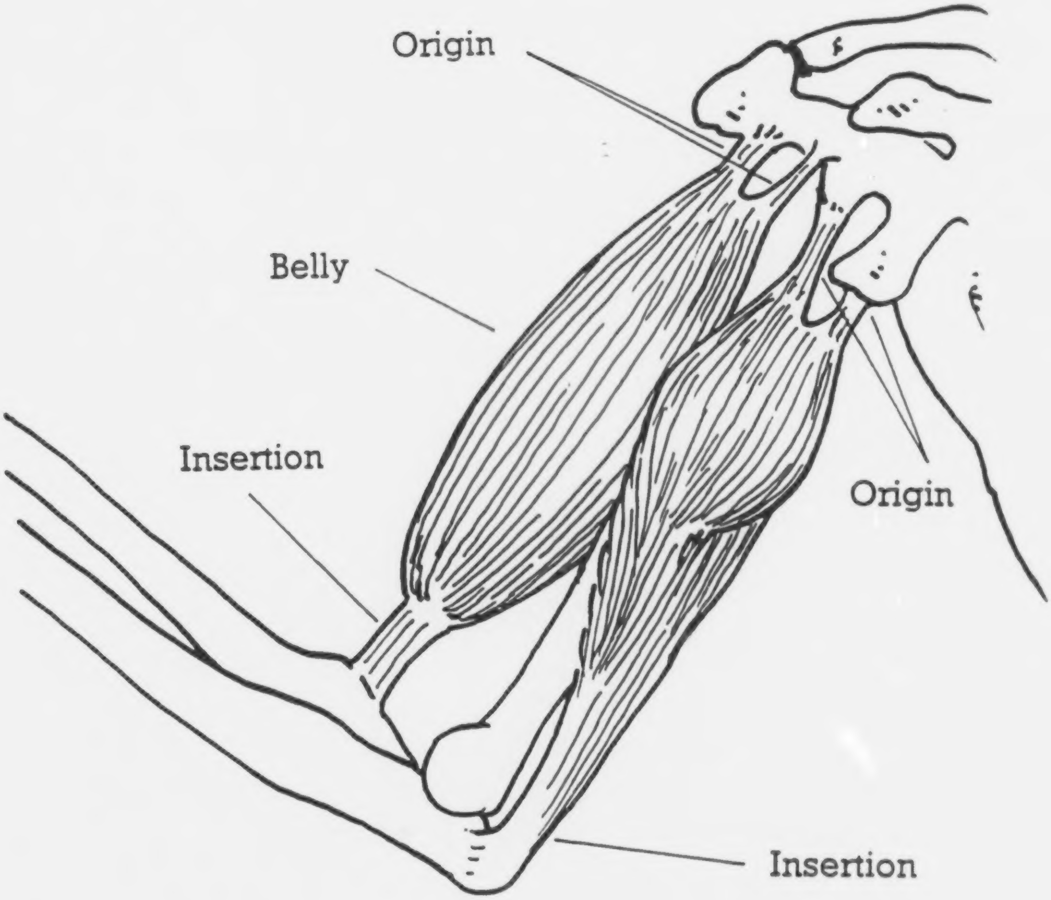


SKELETAL
(Striated)



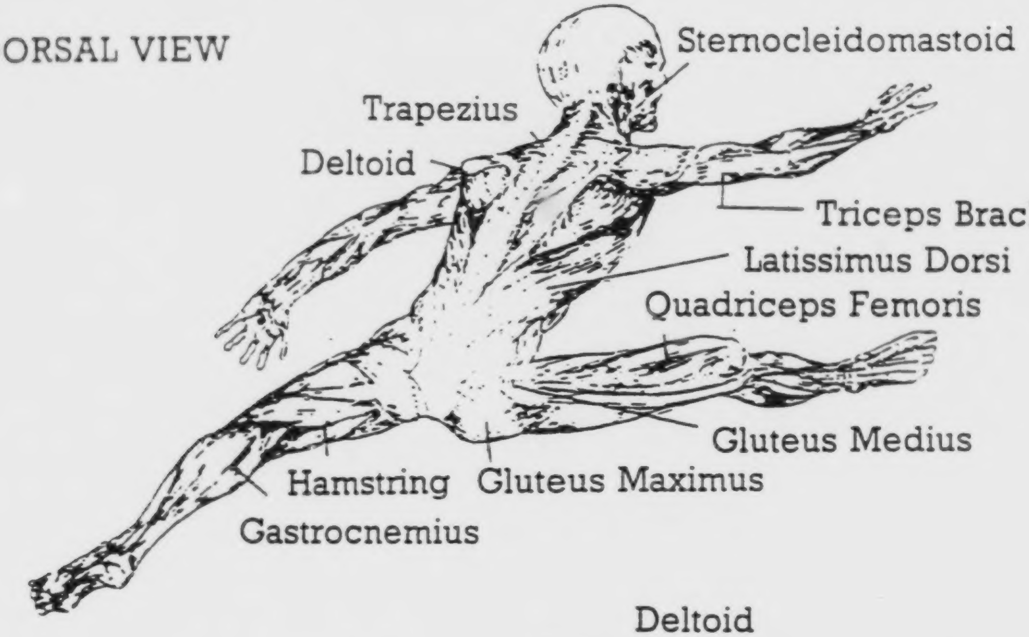
CARDIAC

MUSCLE PARTS

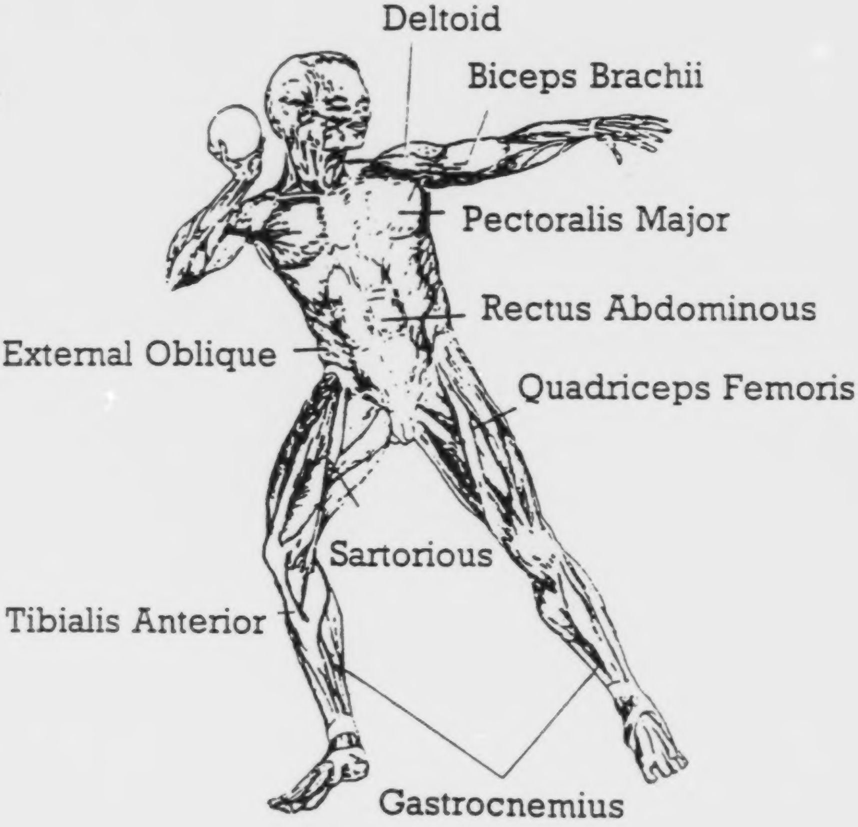

Origin
Belly
Insertion
Origin
Insertion

MUSCLES

DORSAL VIEW


Sternocleidomastoid
Trapezius
Deltoid
Triceps Brachii
Latissimus Dorsi
Quadriceps Femoris
Gluteus Medius
Hamstring
Gluteus Maximus
Gastrocnemius

VENTRAL VIEW


Deltoid
Biceps Brachii
Pectoralis Major
Rectus Abdominous
External Oblique
Quadriceps Femoris
Sartorious
Tibialis Anterior
Gastrocnemius

Anatomy and Physiology, page 5.141

LESSON PLAN: 8

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-8 OR DEMONSTRATION:

HEART AND CIRCULATION
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with the correct definitions.
2. Describe the location of the heart.
3. Describe the function of the heart.
4. Describe the structure of the heart.
5. List the function of the heart conduction system and locate the component parts.
6. Trace the path of circulation.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: The Cardiovascular System
2. HO 2: Conduction System of the Heart
3. HO 3: Path of Circulation
4. Wall chart of the heart
5. Anatomical models

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 8 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

The circulatory system is made up of the blood, heart, and blood vessels (arteries, veins, capillaries). Your heart weighs approximately 12 to 13 ounces and is about 5 inches long and 3 ½ inches wide. The heart is the pump of the body. It is a very complex structure that involves the nervous system and muscular system, as well as the circulatory system.

The heart is vital to life. If your heart stops beating, life stops. You will lose consciousness if the blood flow to your brain ceases for 5 seconds. The muscles twitch convulsively after 15 to 20 seconds. Brain cells are dead after 9 minutes without blood flow.

LESSON PLAN: 8

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

A. Aneurysm - blood-filled, saclike dilation of the wall of an artery

B. Aorta - largest artery in body, rising from left ventricle of the heart; carries oxygenated blood to all parts of the body

C. Aortic-semilunar valve - consists of three half-moon shaped cups; located between junction of aorta and left ventricle of heart

D. Apex - pointed end of a conical structure

E. Artery - a blood vessel that carries blood away from the heart

F. Atrial fibrillation - rapid, irregular rhythm, and intensity of the heart beat; irregular atrial impulses and ineffective atrial contractions

G. Atrioventricular valves - tricuspid and mitral (bicuspid) valves of the heart

H. Atrium - heart's upper chambers

I. Brachiocephalic artery - located on the right side of aortic arch; divided into the right subclavian and right common carotid arteries

J. Cardiac - pertaining to the heart

K. Cardiac arrest - heart fails to pump blood

L. Cardiac arrhythmia - change in the normal rhythm and beat of the heart

M. Cardiac muscle - the muscle of the heart

N. Cardiologist - a specialist in treating disorders of the heart

O. Cardiology - the science and study of the heart

P. Cardiopulmonary resuscitation - the procedure for maintaining respiration and heart beat by manual means when breathing and heart beats have stopped

Q. Carotid artery - supplies blood to the neck and head

R. Coronary - refers to the blood vessels of the heart

S. Diastole - relaxation phase of heart contraction

T. Endocardium - membrane which lines interior of heart

U. Myocardium - heart muscle

V. Pericardium - membrane sac that surrounds the heart

W. Systole - active phase of heart contraction

X. Vein - a vessel which carries blood to the heart

Y. Ventricle - the two lower chambers of the heart

II. Location of the Heart **(II-2)**

- A. In the thoracic cavity behind the sternum, in front of the thoracic vertebrae, and above the diaphragm
- B. If you draw a line down the middle of the chest, you will note that two thirds of the heart is to the left of this line and one third is to the right of the line
- C. Apex - points toward the left and lies on the diaphragm

III. Function of the Heart (HO 1)

- A. Acts as a pump for the blood, which carries nutrients, oxygen, and other elements needed by the cells **(II-3)**

IV. Structure of the Heart

- A. Covering **(II-4)**
  - 1. Pericardium - outer double layer which covers the heart
    - a. Parietal layer
    - b. Visceral layer
  - 2. Function
    - a. Anchorage of the heart
    - b. Prevents friction when the heart beats; between the two layers is a lubricating fluid called pericardial fluid
- B. Layers
  - 1. Serous pericardium - thin inner layer covering the heart
  - 2. Fibrous pericardium - tough outer membrane

3. Myocardium or cardiac muscle - makes up the wall of the heart

4. Endocardium - a smooth tissue that covers the heart valves and lines the blood vessels

C. Septum - thick muscular wall separating the heart into a right half and left half

(II-5)

D. Four chambers

1. Upper chambers

    a. Right atrium (auricle)

    b. Left atrium (auricle)

2. Lower chambers

    a. Right ventricle

    b. Left ventricle

E. Valves - prevent blood from flowing backward into the chambers of the heart

(II-6)

1. Atrioventricular valves

    a. Tricuspid

        (1) Located between right atrium and right ventricle

        (2) Allows blood to flow from right atrium into right ventricle; prevents blood from flowing back into the right atrium

    b. Mitral bicuspid valve

        (1) Located between the left atrium and left ventricle

        (2) Allows blood flow from the left atrium to the left ventricle; prevents blood from flowing back into the atrium

2. Semilunar valves

    a. Pulmonary semilunar valve

        (1) Located at the opening of the pulmonary artery

        (2) Allows blood to flow from the right ventricle into the pulmonary artery and then to the lungs

    b. Aortic semilunar valve

(1) Located at the opening of the aorta

(2) Allows blood to pass from the left ventricle into the aorta; prevents blood from passing back into the ventricle

V. Conduction System of the Heart (Heart Contractions) **(II-7)**

A. Four structures - located in heart wall (HO 2)

1. Sinoatrial note (SA node or pacemaker) - a cluster of specialized heart muscle cells located in the right atrial wall of the heart; generates impulses that travel through heart causing it to contract

2. Atrioventricular note (AV node) - a cluster of specialized heart muscle cells located in the septal wall of right atrium; receives impulses from SA node and conducts them to bundle of His

3. The bundle of His (atrioventribular bundle) - special cardiac fiber located on septum wall of the right atrium extending from the AV node to the top of the intraventricular septum where it divides into the bundle branches

4. The Parkinje's fibers - special cardiac fibers that are a continuation of the bundle branches; they extend to the muscle walls of the ventricles

B. Normal path of conduction

1. Conduction normally starts in the SA node.

2. The SA node stimulates the contraction of both atria. At this time, blood flows into the ventricles from the atria. It passes through the tricuspid and mitral valves. At the same time, the ventricles are filling with blood.

3. The AV node stimulates the contraction of both ventricles. Blood in the ventricles is pumped into the pulmonary artery and the aorta through the semilunar valves.

4. The ventricles relax and the semilunar valves are closed. This prevents the flow of blood back into the ventricles. The cycle repeats itself.

VI. Path of Circulation (HO 3) **(II-8)**

A. Deoxygenated blood from the head, neck, and arms returns to the right atrium of the heart by the superior vena cava. The superior vena cava is one of the two largest veins in the body.

B. Deoxygenated blood from the legs and trunk enters the right atrium of the heart by the large inferior vena cava.

C. Right atrium contracts and forces the blood through the tricuspid valve into the right ventricle.

D. The right ventricle contracts and pushes the blood through the pulmonary semilunar valve.

E. The right and left pulmonary arteries bring the deoxygenated blood to the right and left lungs.

F. Inside the lungs

   1. Pulmonary arteries branch into arterioles (many small arteries).

   2. Arterioles are connected to capillaries within the alveoli lung tissue. It is here that carbon dioxide leaves the red blood cells and is eventually exhaled from the body.

   3. In the alveoli, oxygen combines with hemoglobin in the red blood cells.

   4. Oxygenated blood then travels to the small venule veins.

   5. Venules from the right lung form the two large pulmonary veins.

   6. The pulmonary veins carry oxygenated blood from the lungs to the left atrium of the heart.

G. The left atrium contracts and the blood passes through the bicuspid valve into the left ventricle.

H. Left ventricle contracts and sends oxygenated blood through the aortic semilunar valve into the aorta.

I. Aorta - the largest artery in the body

   1. The aorta as it emerges from the anterior of the heart forms an arch which is called the aortic arch

   2. Aortic arch has three branches: the brachiocephalic, the left common carotid, and left subclavian arteries. These arteries carry blood to the arms, neck, and head.

   3. The descending aorta forms from the aortic arch which carries oxygenated blood throughout the body.

   4. The coronary artery is the first branch from the aorta and is the artery that carries blood to the heart muscle.

   5. The descending aorta carries blood to the lower part of the body.

J. Arteries branch into arterioles.

K. Arterioles branch into the capillaries where oxygen and glucose pass into the cells. Carbon dioxide and waste materials pass into the capillaries.

L. Capillaries carry the deoxygenated blood to the venules which connect to the veins.

M. The veins ultimately connect with the superior vena cava or inferior vena cava.

VII. Summary and Conclusion

A. Terms and definitions

B. The heart

C. Conduction system

D. Path of circulation

This lesson has been over the structure, function, and conduction system of the heart and circulation of blood. Your next lesson will be over blood cells, blood types, and lymphatic system.

LESSON PLAN: 8

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms found in this lesson?
2. Where is the heart located?
3. What is the function of the heart?
4. What is the outer double layer covering of the heart called?
5. What are the four chambers of the heart?
6. Where are the tricuspid, mitral, semilunar, and aortic valves located?
7. Where are the component parts of the heart's conduction system located?
8. What is the path of circulation of blood through the body?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Dissect and examine a heart (beef, etc.). Discuss structure, conduction, and circulation.
2. Invite EKG technician to class - show EKG or if possible run a strip in class.

ANSWERS TO EVALUATION ITEMS:

1.	b
2.	e
3.	f
4.	a
5.	c
6.	d
7.	blood
8.	c
9.	d
10.	c
11.	b

12. b AV node
d Purkinje's fibers
a SA node
c Bundle of His

13. a. Superior vena cava
b. Pulmonary semilunar valve
c. Right atrium
d. Tricuspid valve
e. Right ventricle
f. Inferior vena cava
g. Aorta
h. Pulmonary artery
i. Pulmonary veins
j. Left atrium
k. Coronary arteries
l. Mitral valve
m. Aortic semilunar valve
n. Left ventricle

LESSON PLAN: 8

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

	Column I			Column II
____	1.	Vein	a.	Refers to the blood vessels of the heart
____	2.	Aorta	b.	A vessel that carries blood to the heart
____	3.	Artery	c.	Pertaining to the heart
____	4.	Coronary	d.	Heart's upper chamber
____	5.	Cardia	e.	Largest artery in the body
			f.	A blood vessel that carries blood away from the heart

6. Where is the heart located? (Circle the letter of the best answer.)

   a. At the lower end of the trachea, in front of the cervical vertebrae, and below the diaphragm
   b. Upper part of the abdominal cavity just to the left and below the diaphragm
   c. On the right side of the abdominal cavity, slightly underneath the diaphragm
   d. Behind the sternum, in front of the thoracic vertebrae, and above the diaphragm

7. The heart acts as a pump for the ____.

8. What is the outer double layer covering of the heart called? (Circle the letter of the best answer.)

   a. Myocardium
   b. Endocardium
   c. Pericardium
   d. Atrium

9. The upper chambers of the heart are called the right and left: (Circle the letter of the best answer.)

   a. Myocardium.
   b. Endocardium.
   c. Ventricles.
   d. Atrium.

10. The lower chambers of the heart are called the right and left: (Circle the letter of the best answer.)

   a. Myocardium.
   b. Endocardium.
   c. Ventricles.
   d. Atrium.

11. Where is the tricuspid valve located? (Circle the letter of the best answer.)

   a. At the opening of the aorta
   b. Between the right atrium and the right ventricle
   c. Between the left atrium and left ventricle
   d. At the opening of the pulmonary artery

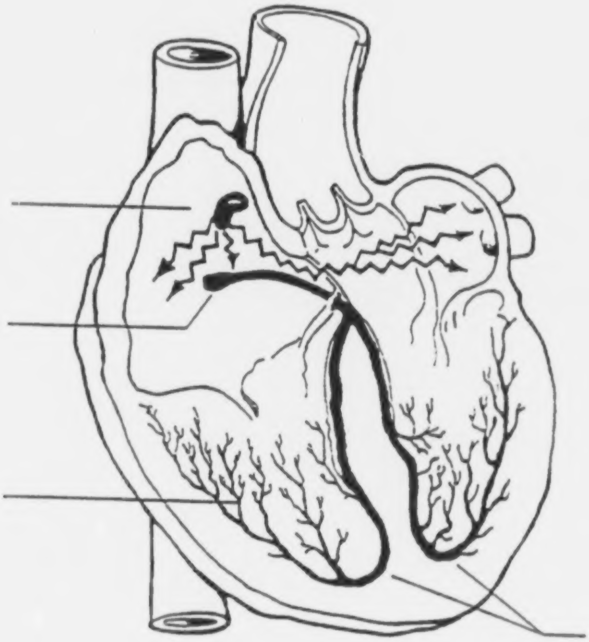
12. Locate the component parts of the heart conduction system.

___ AV node

___ Purkinje fibers

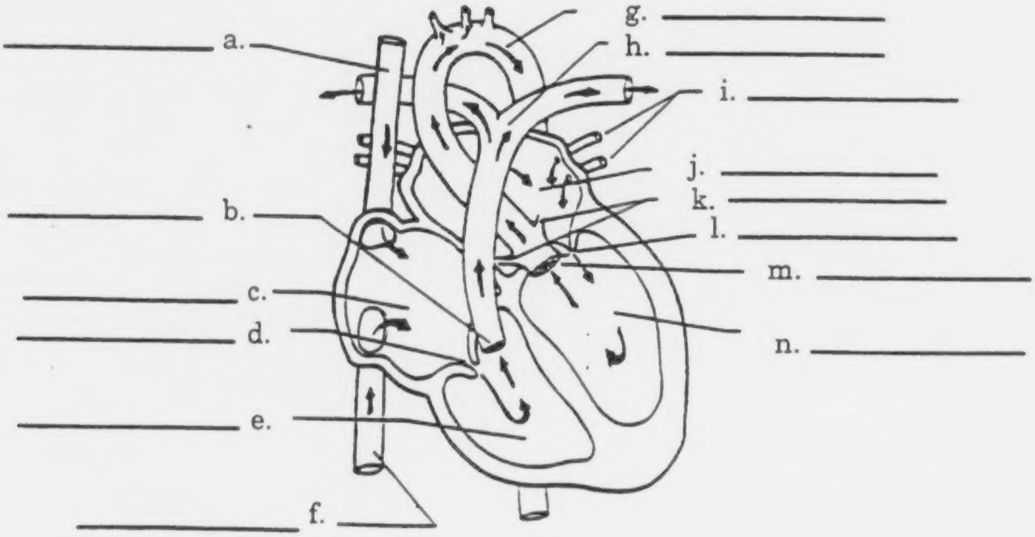
___ SA node

___ Bundle of His

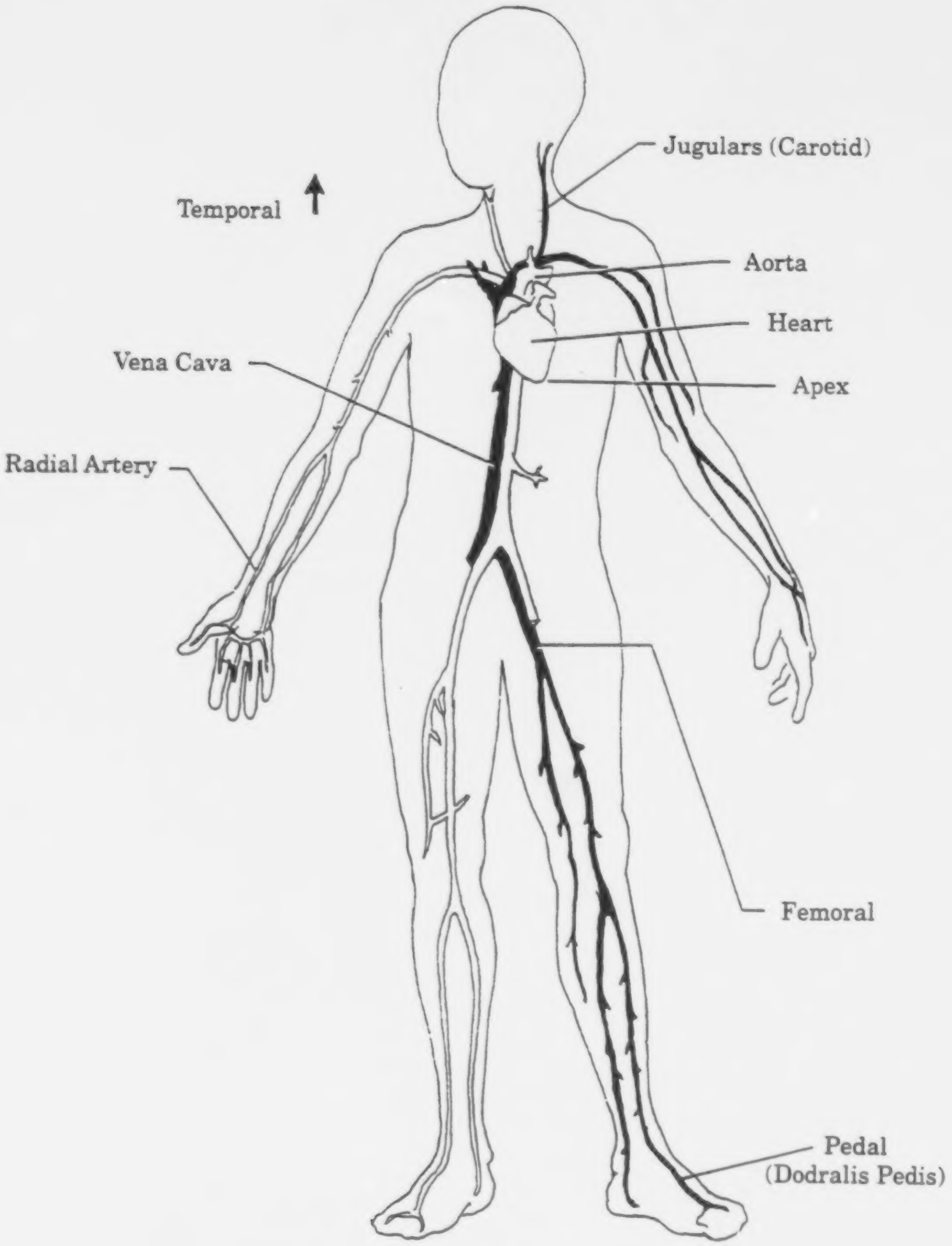


13. Trace the path of circulation on the diagram below, by labeling the parts on the diagram.

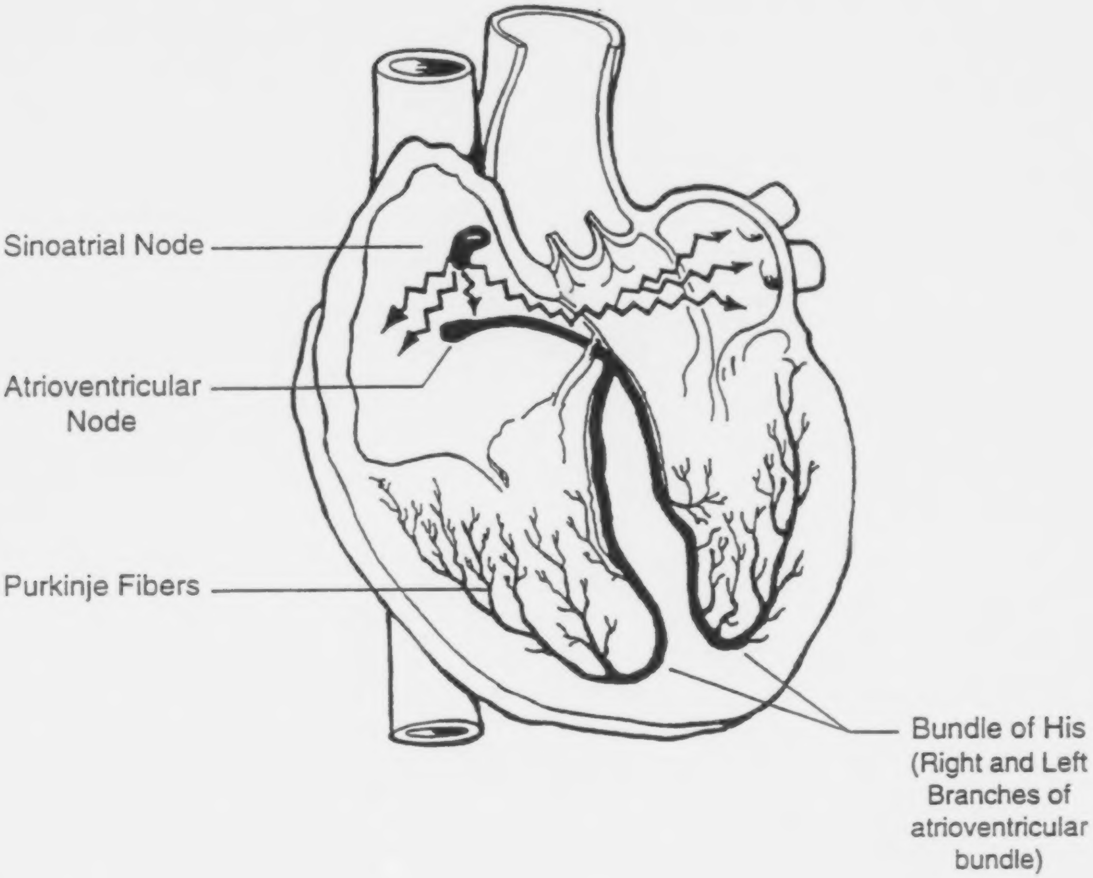
Superior vena cava
Aorta
Inferior vena cava
Right atrium
Left atrium
Pulmonary artery
Pulmonary semilunar valve
Mitral valve
Tricuspid valve
Right ventricle
Left ventricle
Pulmonary veins
Coronary arteries
Aortic semilunar valve



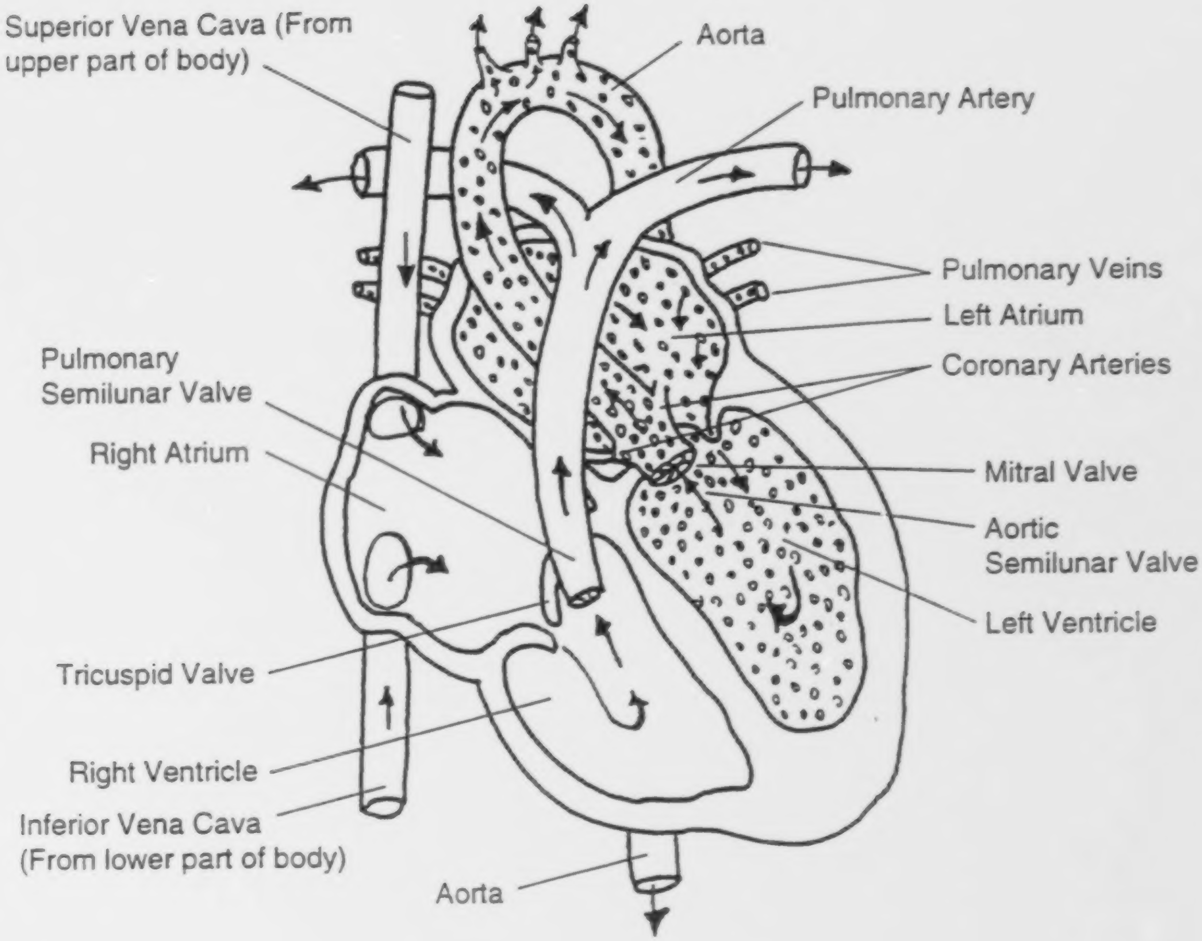
THE CARDIOVASCULAR SYSTEM


Jugulars (Carotid)
Temporal
Aorta
Heart
Vena Cava
Apex
Radial Artery
Femoral
Pedal
(Dodralis Pedis)

CONDUCTION SYSTEM OF THE HEART


Sinoatrial Node
Atrioventricular Node
Purkinje Fibers
Bundle of His (Right and Left Branches of atrioventricular bundle)

PATH OF CIRCULATION


Superior Vena Cava (From upper part of body)
Aorta
Pulmonary Artery
Pulmonary Veins
Left Atrium
Coronary Arteries
Pulmonary Semilunar Valve
Right Atrium
Mitral Valve
Aortic Semilunar Valve
Left Ventricle
Tricuspid Valve
Right Ventricle
Inferior Vena Cava (From lower part of body)
Aorta

LESSON PLAN: 9

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-9 OR DEMONSTRATION:

BLOOD CELLS, BLOOD TYPES, RH FACTOR, AND LYMPHATIC SYSTEM

(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Define terms presented in this lesson.
2. Name the three types of blood cells.
3. Identify the function of red blood cells.
4. Identify the function of white blood cells.
5. Identify the function of platelets.
6. Describe blood types.
7. Describe the Rh factor.
8. Identify laboratory tests.
9. Describe the lymphatic system and its function.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Formed Elements
2. HO 2: Blood

3. HO 3: The Lymphatic System

4. HO 4: Lymph Nodes

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 9 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

Blood is the principle fluid of the heart and the circulatory system. It maintains homeostasis in the body. Blood is necessary for the survival of all body cells.

LESSON PLAN: 9

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Anemia - red blood cell count drops below normal

   B. Antigen - a substance that stimulates the body to make antibodies

   C. Cell - a definite unit in the organization of living substance, consisting of a small mass of protoplasm with a nucleus and surrounded by a membrane (the plasma, or cell, membrane)

   D. Erythroblast - an immature red cell

   E. Erythrocyte - a red blood cell

   F. Hematocrit - the volume percentage of red cells to the whole blood (separation of red cells for counting)

   G. Hemoglobin - iron-containing protein in red blood cells

   H. Leukemia - malignant (cancer) disease which has to do with a large increase in the number of white cells

   I. Leukocyte - a white blood cell

   J. Leukopenia - abnormally low white blood cell count

   K. Lymphocyte - a white cell which is formed in the lymph glands

   L. Phagocytosis - ingestion and digestion of microbes by neutrophils and monocytes (part of white blood cells)

   M. Plasma - liquid part of blood

   N. Polycythemia - bone marrow produces an excess of red blood cells

   O. Thrombocyte - a clotting cell

II. Blood Cells (HO 1) **(II-2)**

   A. Types

      1. Red blood cells - erythrocytes

        2. White blood cells - leukocytes

        3. Platelets - thrombocytes

    B. Red and white blood cells are continually being destroyed. The body has to continually make new ones. Your body makes a few million red blood cells every second.

        1. Myeloid tissue is found mainly in the sternum, ribs, hip bones, and cranial bones.

        2. Myeloid tissue makes lymphatic tissue and blood cells for the body.

    C. The lymphatic system forms lymphocytes and monocytes

III. Red Blood Cells - Erythrocytes

    A. Characteristics

        1. Have no nucleus

        2. Cells are caved in on both sides so that each one has a thin center and thicker edge.

    B. Function **(II-3)**

        1. Transport oxygen from the lungs to all the body cells

        2. Transport carbon dioxide from the body cells to the lungs

    C. Number - 4 ½ million to 5 million per cubic millimeter of blood

IV. White Blood Cells - Leukocytes

    A. Characteristics

        1. Colorless

        2. Have nucleus

    B. Types

        1. Granulocytes

            a. Neutrophils

            b. Eosinophils

            c. Basophils

        2. Agranulocytes
            a. Lymphocytes
            b. Monocytes
    C. Function
        1. Fight microorganisms that have invaded the tissue and blood stream **(II-4)**
        2. Neutrophils and monocytes engulf microbes. They take microbes into their cell bodies and digest the microbes.
        3. When a microbe invades the body they stimulate lymphocytes to start multiplying and to be transformed into plasma cells which makes an antibody.
    D. Number - 5,000 to 10,000 per cubic millimeter of blood

V. Platelets - Thrombocytes
    A. Function - to start the blood clotting mechanism **(II-5)**
        1. An injury (bruise, cut, etc.) to the endothelium causes a rough spot
        2. As platelets flow over the rough spot, some rupture and release platelet coagulation factors, others will enlarge and become sticky.
    B. Blood Clotting
        1. Stage I - Extrinsic/intrinsic damage causes release of tissue factor (TF) and together with calcium ions and coagulation factors form the prothrombin activator.
        2. Stage II - Calcium ions react with prothrombin to form thrombin.
        3. Stage III - Calcium ions react with fibrinogen to form insoluble fibrin threads. The insoluble fibrin forms a network of fibers (weblike) that entraps red blood cells and platelets to form a blood clot.
        4. Fibrinolysis - The process of clot dissolution. Without this process, the clot would continue to increase in size, cutting off the circulation.
    C. Produced in the red bone marrow (life span is 1-3 days)
    D. 250,000 to 500,000 per cubic millimeter of blood

E. Causes of Bleeding

  1. Clotting disorders

    a. Deficiency of platelets

    b. Vitamin K deficiency

    c. Deficiency of vitamin C

    d. Hemophilia

  3. Anticoagulant drugs

  3. Injury of blood vessel

  4. Erosion of blood vessel (e.g. due to cancer)

VI. Blood Types (HO 2)

A. Blood type is identified by the presence of the red blood cells of certain antigens.

  1. The antigen stimulates the body to make antibodies.

  2. The antibodies react with antigens to clump or stick together.

B. According to types

  1. Type A - 41% of Caucasian Americans and 27% of African Americans have this type. A person is born with Type A antigen and his or her body does not form antibodies to react with it. Type A blood contains Type A antigen in red blood cells and anti- B antibodies in the plasma.

  2. Type AB - (universal recipient) The red blood cells contain both A and B antigens and the plasma does not contain the anti- A or anti- B antibodies. 4% of Caucasian Americans and 7% of African Americans have this type.

(II-6)

  3. Type O - (universal donor) The red blood cells do not contain type A or type B antigens and the plasma does contain anti- A and anti-B antibodies. 45% of Caucasian Americans and 46% of African Americans have this blood type. **(II-7)**

  4. Type B - Contains Type B antigen in red blood cells and Anti-A antibodies in the plasma. 10% of Caucasian Americans and 20% of African Americans have this blood type.

VII. Rh Factor

A. Rh positive blood - the red blood cells contain an antigen called the Rh factor. 85% of Caucasian Americans are positive (contain the agglutinogen). 88% of African Americans are positive. **(II-8)**

B. Rh negative blood - the red blood cells do not contain the Rh factor. 15% of Caucasian American are negative. 12% of African Americans are negative. **(II-9)**

C. Erythroblastosis - occurs when the mother is Rh negative and the father is Rh positive.

VIII. Laboratory Tests **(II-10)**

A. Blood counts

1. CBC - complete blood count

2. WBC - white blood cell count

3. RBC - red blood cell count

4. HGB - hemoglobin count

5. HCT - hematocrit count

B. Bleeding time

C. Blood chemistry

D. Serology

E. Blood type - cross matching

IX. Lymphatic System (HOs 3 & 4)

A. Function

1. Drain excess fluid from tissues

2. Absorption of fats from small intestine

3. Protection from foreign invaders

B. Structures

1. Capillaries - made of endothelium (simple squamous epithelium)

2. Lymphatic vessels - drains the body and empties into the right and left subclavian veins

3. Lymph nodes (glands) **(II-11)**

   a. Filters the lymph once it is drained from the tissues on its way back to the cardiovascular system

   b. Spaces within the lymph nodes are set aside for the production of lymphocytes

   c. Located throughout the body in clusters

4. Thymus

   a. Located in the upper thorax behind the sternum and between the lungs

   b. Usually found only in children (shrinks with age)

5. Spleen

   a. Located in the upper left hypochondriac region of the abdomen

   b. Is the largest mass of lymphatic tissue in the body

   c. Designed to filter blood and destroy old, worn-out blood cells

   d. Cleanses the blood by filtration and phagocytosis

   e. Produces red blood cells before birth

   f. Serves as a reservoir for blood, in case of a hemorrhage or other emergency

6. Tonsils

   a. Large lymphatic nodules embedded at the junction of the oral cavity and pharynx

      (1) Produce lymphocytes and antibodies

      (2) Strategically located to protect against invasion of foreign substances that are inhaled or ingested

7. Lymph

   a. Lymph is the fluid that seeps from the blood into the tissue spaces

      (1) It is similar in composition to plasma (contains fewer proteins).

      (2) After the fluid seeps into tissue spaces, it is called interstitial fluid (intercellular fluid).

(3) It becomes lymph when it is absorbed into the lymphatic capillaries.

X. Summary and Conclusion

A. Terms and definitions

B. Blood cells

C. Red blood cells - erythrocytes

D. White blood cells - leukocytes

E. Platelets - thrombocytes

F. Blood types

G. Rh factor

H. Laboratory tests

I. Lymphatic system

In this lesson, blood cells, types of blood cells, the Rh factor and lymphatic system were discussed. The next lesson will be blood vessels.

LESSON PLAN: 9

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms used in this lesson?
2. What are the three types of blood cells?
3. What is the function of red cells?
4. What is the function of white cells?
5. What is the function of platelets?
6. What type of blood is a universal recipient?
7. What type of blood is a universal donor?
8. What does Rh positive blood mean?
9. What is meant by Rh negative blood?
10. What are the following laboratory tests: CBC, WBC, RBC, HGB, and HCT?
11. What is the function of lymph nodes?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Obtain blood typing kits and have students type their own blood.
2. Visit a blood bank or have representative from blood bank speak to class.
3. Assign reports on blood disorders.

ANSWERS TO EVALUATION ITEMS:

1. b
2. d
3. e
4. a
5. c
6. Red blood cells, white blood cells, platelets
7. c
8. b

9. Positive
10. d
11. c
12. b
13. a

561

LESSON PLAN: 9

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with the correct definition in Column II.

Column I

___ 1. Plasma
___ 2. Antigen
___ 3. Polycythemia
___ 4. Hematocrit
___ 5. Phagocytosis

Column II

a. The volume percentage of red cells to the whole blood
b. Liquid part of blood
c. Ingestion and digestion of microbes by neutrophils and monocytes
d. A substance that stimulates the body to make antibodies
e. Bone marrow produces an excess of red blood cells
f. Iron-containing protein in red blood cells

6. Name the three types of blood cells.

a. ______________________________

b. ______________________________

c. ______________________________

7. What is the function of red blood cells? (Circle the letter of the best answer.)

a. Clot blood
b. Fight microorganisms
c. Transport oxygen and carbon dioxide
d. Fight infection

8. A universal recipient has what type of blood? (Circle the letter of the best answer.)

a. Type A
b. Type AB
c. Type O
d. Type B

9. The red blood cells contain an antigen called the Rh factor in Rh ______________________________ blood.

10. Which abbreviation means a complete blood cell count? (Circle the letter of the best answer.)

    a. WBC
    b. RBC
    c. HGB
    d. CBC

11. What is the function of lymph nodes? (Circle the letter of the best answer.)

    a. Transport food and oxygen
    b. To keep blood from flowing backward
    c. Filter harmful particles and form white blood cells
    d. Act as a conduction system

12. What is the function of white blood cells? (Circle the letter of the best answer.)

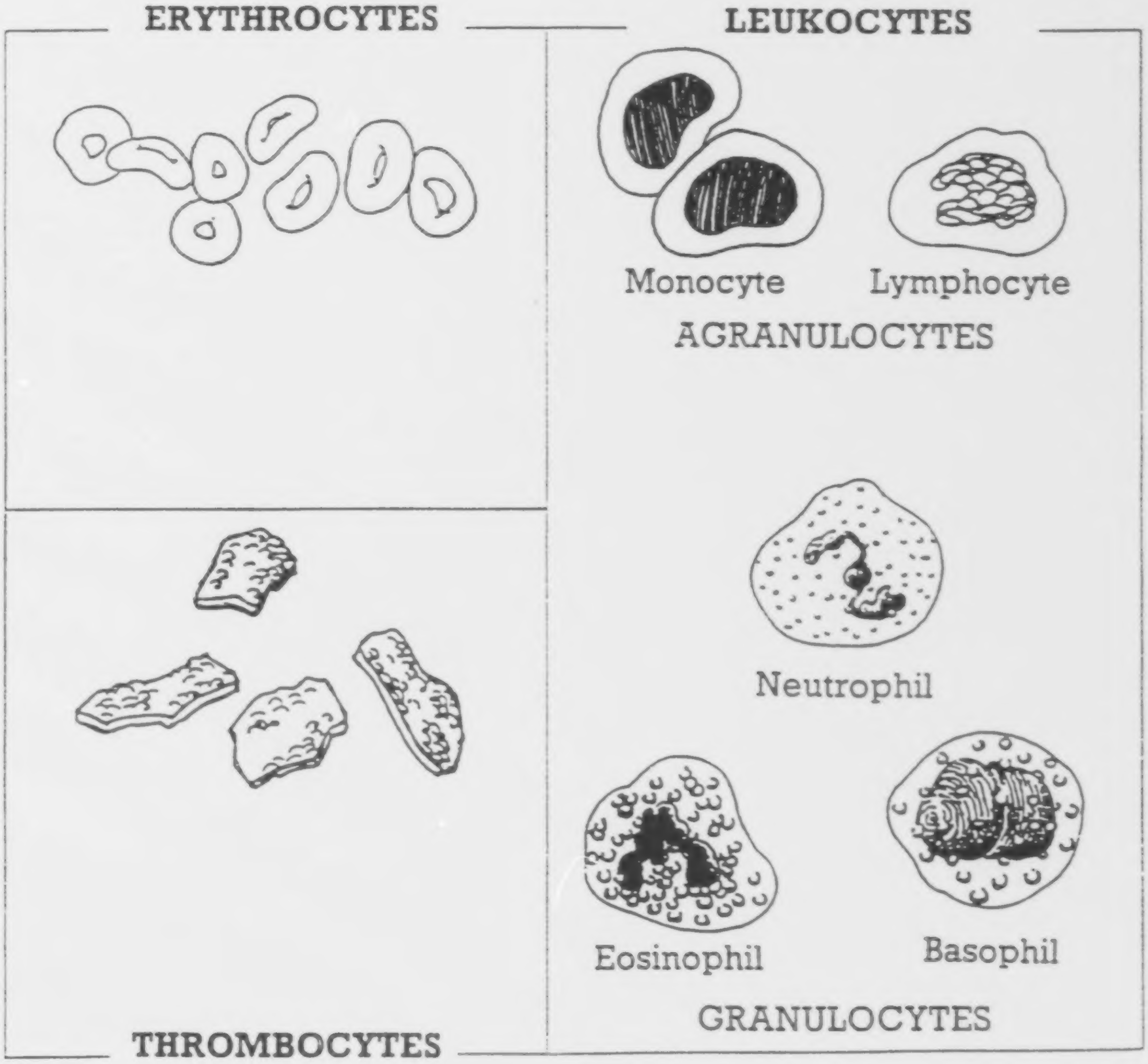
    a. Clot blood
    b. Fight microorganisms
    c. Transport oxygen and carbon dioxide
    d. Fight infection

13. What is the function of platelets? (Circle the letter of the best answer.)

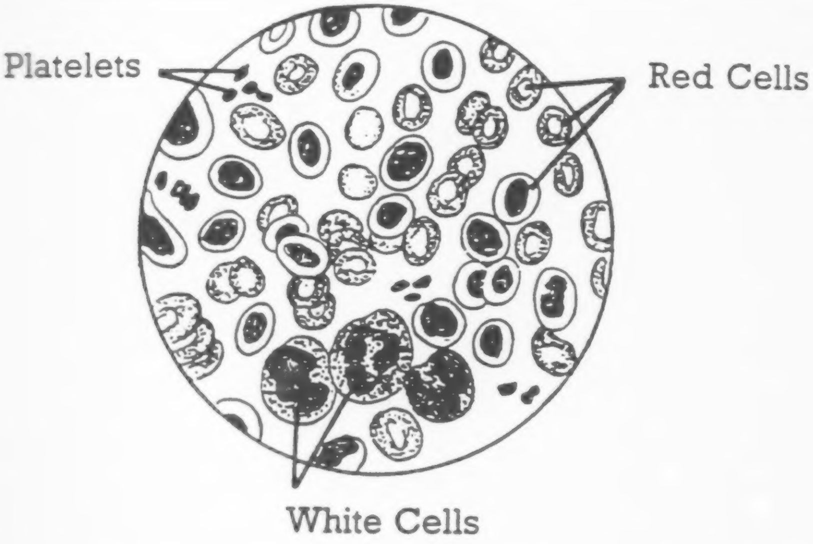
    a. Clot blood
    b. Fight microorganisms
    c. Transport oxygen and carbon dioxide
    d. Fight infection

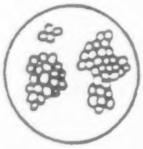
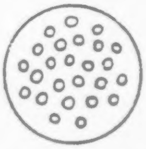
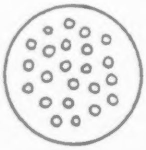
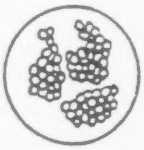
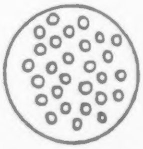
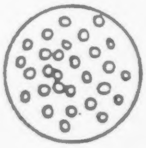
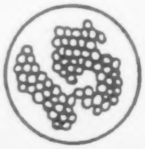
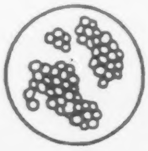
HO 1

FORMED ELEMENTS


ERYTHROCYTES
LEUKOCYTES
Monocyte
Lymphocyte
AGRANULOCYTES
Neutrophil
Eosinophil
Basophil
GRANULOCYTES
THROMBOCYTES

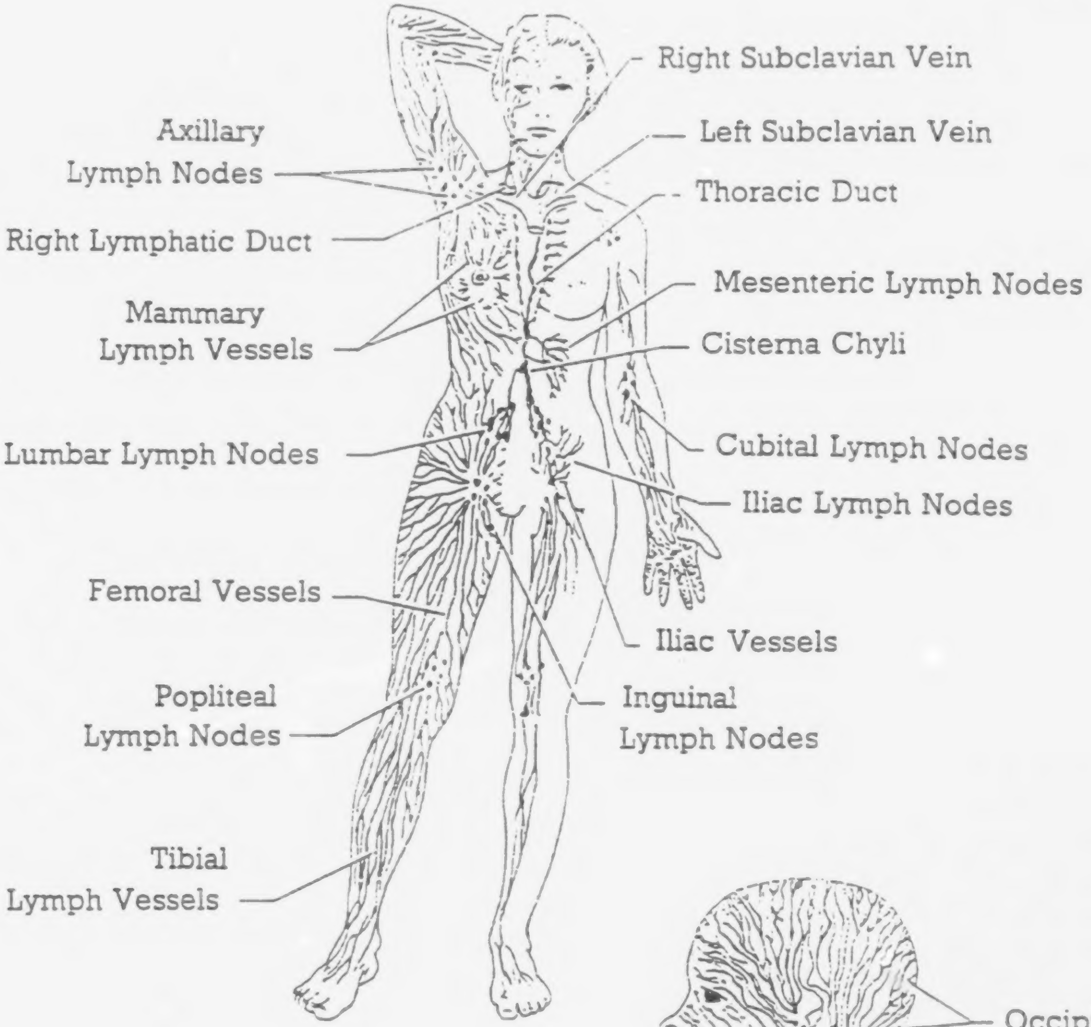
BLOOD

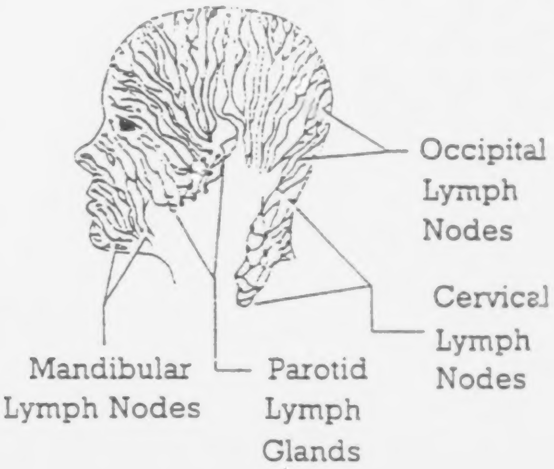

Platelets
Red Cells
White Cells

TYPE	**Anti-A**	**Anti-B**
A		
B		
O		
AB		

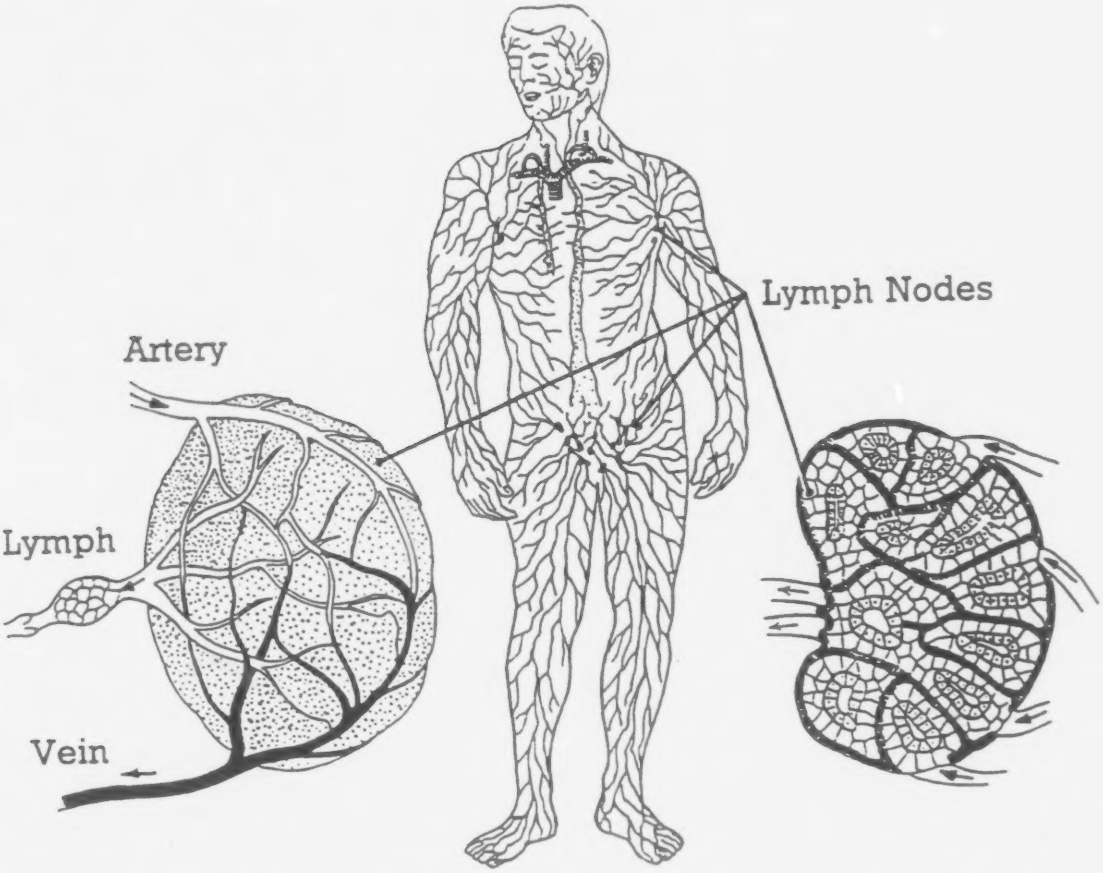
THE LYMPHATIC SYSTEM

LYMPH NODES AND VESSELS OF THE HEAD AND BODY


Right Subclavian Vein
Axillary Lymph Nodes
Left Subclavian Vein
Thoracic Duct
Right Lymphatic Duct
Mesenteric Lymph Nodes
Mammary Lymph Vessels
Cisterna Chyli
Lumbar Lymph Nodes
Cubital Lymph Nodes
Iliac Lymph Nodes
Femoral Vessels
Iliac Vessels
Popliteal Lymph Nodes
Inguinal Lymph Nodes
Tibial Lymph Vessels


Occipital Lymph Nodes
Cervical Lymph Nodes
Mandibular Lymph Nodes
Parotid Lymph Glands

LYMPH NODES


Lymph Nodes
Artery
Lymph
Vein

LESSON PLAN: 10

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-10 OR DEMONSTRATION:

BLOOD VESSELS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Define terms presented in this lesson.
2. Identify blood vessels, their structure, and function.
3. Describe blood pressure.
4. Identify areas where a pulse may be taken.
5. Identify types of circulation.
6. Describe valvular, coronary, and vascular disease and condition.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Blood Vessels
2. HO 2: Arteries
3. HO 3: Veins
4. HO 4: General or Systemic Circulation
5. HO 5: Pulmonary Circulation
6. HO 6: Fetal Circulation

7. Wall Chart of the Heart

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 10 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

The circulatory system maintains homeostasis by acting as a transportation system. Food and oxygen are conveyed from the digestive system and respiratory system to all the body cells. Waste products are removed from the cells by the circulatory system and disposed of through the kidneys, lungs, and skin where they are excreted. The three main blood vessels in the body are arteries, veins, and capillaries.

LESSON PLAN: 10

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

- A. Arteriole - small branch of an artery
- B. Artery - blood vessel that carries blood away from the heart
- C. Capillary - blood vessel that connects arterioles with venules, microscopic in size
- D. Diastole - the dilation stage of the cardiac cycle
- E. Diastolic blood pressure - the force when the ventricles are relaxed
- F. Endothelium - epithelial cells; they line closed body cavities, blood vessels, and heart and lymph vessels
- G. Interstitial fluid - intercellular connective tissue fluid
- H. Pulse - alternating expansion and contraction of an artery as blood flows through it
- I. Systolic blood pressure - pressure at the moment of contraction
- J. Valve - a structure that allows the flow of blood or fluid in only one direction
- K. Venules - tiny veins

II. Blood Vessels (HO 1) **(II-2, 3)**

- A. Arteries
  - 1. Description
    - a. Arteries are elastic and muscular and have thick walls. They are the strongest of the three main types of blood vessels.
    - b. Arteries transport blood under high pressure. **(II-4)**
  - 2. Function
    - a. All arteries carry blood away from the heart.

    - b. All arteries carry oxygenated blood except the pulmonary arteries. The pulmonary arteries carry deoxygenated blood from the heart to the lungs.

  3. Structure - three wall layers

    - a. Tunica adventitia or externa - outer layer **(II-5)**

    - b. Tunica media - middle layer - this layer regulates the blood flow through the artery

    - c. Tunica intima - inner layer

  4. Distribution

    - a. The pulmonary trunk and aorta lead away from the heart.

    - b. They branch into smaller arteries.

    - c. Smaller arteries branch into arterioles.

    - d. Arterioles branch into capillaries.

  5. Arteries of the body (HO 2)

B. Capillaries

  1. Description

    - a. They are so small they can only be seen through a microscope. **(II-6)**

    - b. They connect arterioles with venules.

  2. Structure

    - a. Capillaries are simple endothelial cells.

    - b. The walls are very thin.

  3. Function

    - a. They are exchange vessels.

    - b. Glucose and oxygen move out of the blood in the capillaries into interstitial fluid and into cells.

    - c. Carbon dioxide moves into the capillary blood from the cells.

    - d. Fluid is exchanged between capillary blood and interstitial fluid.

e. Ultimately, capillaries are responsible for transporting blood to all of the body's tissues.

C. Veins (HO 3)

1. Description

a. Veins carry blood back to the heart.

b. Veins carry deoxygenated blood except the four pulmonary veins **(II-7)**

c. The pulmonary veins carry oxygenated blood away from the lungs to the heart.

2. Structure

a. They contain a muscular layer but are less elastic and muscular than arteries.

b. Walls are thinner than the walls of arteries.

c. Veins have valves which allows the blood to flow in only one direction.

3. Function - Carry blood back to the heart

4. Distribution

a. Capillaries merge into venules.

b. Venules converge to make up veins.

c. Veins converge to form the superior and inferior vena cava.

d. The vena cava returns blood to the heart.

(1) Upper body veins become the superior vena cava.

(2) Lower body veins become the inferior vena cava.

III. Blood Pressure

A. Blood pressure is the force of blood against the walls of arteries. **(II-8)**

B. High blood pressure can cause the rupture of blood vessels.

C. If your blood pressure falls low enough, circulation and life can cease - example - hemorrhage.

IV. Pulse **(II-9)**

A. Pulse is the alternate expansion and contraction of the arteries as the heart beats.

B. To feel a pulse, you place your fingertips over an artery that is near the surface of the body and over a bone or other firm surface.

C. Six areas to take a pulse

1. Radial artery - at the wrist, posterior surface of the radius
2. Temporal artery - above and to the outer side of the eye, in front of the ear
3. Common carotid artery - in the neck along the front margin of the sternocleidomastoid muscle, near the lower margin of the thyroid cartilage
4. Facial artery - at lower edge of the mandible, near the corners of the mouth
5. Brachial artery - at the bend of the elbow, along the inner border of the biceps muscle
6. Dorsalis pedis artery - on the top of the foot, below the ankle joint

V. Types of Circulation **(II-10)**

A. Systemic circulation - flow of blood from the left ventricle throughout the body as a whole (HO 4)

B. Pulmonary circulation - flow of blood from the right ventricle to the lung (HO 5)

C. Portal circulation - circulation of blood through the liver

D. Renal circulation - circulation of blood from the aorta through the renal artery to the kidney and then by way of the renal vein back into the inferior vena cava and then the heart

E. Fetal circulation (HO 6)

F. Coronary circulation - circulation of blood to the heart muscle

VI. Valvular, Coronary, and Vascular Diseases and Conditions **(II-11)**

A. Rheumatic fever - the cause is unknown, but it is thought to be related to upper respiratory infection (streptococcus). It can lead to permanent damage to the heart and valves.

B. Endocarditis - It is an inflammation of the lining of the heart and lining of the heart valves.

C. Mitral insufficiency - mitral valve does not close completely.

D. Angina pectoris - blood supply to heart does not meet the heart's needs; causes severe chest pain.

E. Hypertension - (high blood pressure) - a systolic pressure of 150 mm Hg or above and/or a diastolic pressure of 90 mg Hg is considered to be high blood pressure.

F. Arteriosclerosis - thickening, loss of elasticity, and calcification of arterial walls, resulting in a decreased blood supply, especially to the cerebrum and lower extremities

G. Varicose veins - dilated, tortuous veins: blood collects in these veins and cannot be returned efficiently to the heart.

H. Phlebitis - inflammation of a vein

I. Embolism - floating blood clot in a vein

J. Leukemia - cancer of the blood

K. Myocardial infarction - obstruction of a blood vessel in the heart muscle, which results in death of heart tissue due to the lack of oxygen

L. Anemia - decrease in the quality and quantity of red blood cells

M. Cerebral vascular accident (stroke) - caused by a blockage or rupture of arteries in the brain

N. Congestive heart failure - heart is unable to pump enough blood for the body

O. Atherosclerosis - vessel walls become thick, fibrotic, and calcified, and the lumen narrows, resulting in reduced blood flow to organs normally supplied by the artery

P. Thrombus - an aggregation of platelets, fibrin, clotting factors, and cellular elements, frequently causing vascular obstruction at the point of its formation; stationary blood clot

Q. Thrombophlebitis - inflammation of a vein causing a clot

VII. Summary and Conclusion

A. Terms and definitions

B. Blood vessels

C. Blood pressure

D. Pulse

E. Valvular, coronary, and vascular diseases and conditions

This lesson discussed types of blood vessels, types of circulation, pulse, and valvular, coronary and vascular diseases and conditions. In your next lesson we will discuss blood pressure.

LESSON PLAN: 10

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of diastolic pressure, valve, arteriole, and artery?
2. What are the three main types of blood vessels?
3. What is the structure of the three types of blood vessels?
4. What blood vessel carries oxygenated blood?
5. What are the names of the three layers of the arterial wall?
6. What blood vessel connects arterioles with venules?
7. What blood vessel carries deoxygenated blood?
8. What causes blood pressure?
9. What areas of the body can a pulse be taken?
10. What are the six types of circulation?
11. What is the description of each of the following: angina pectoris, hypertension, arteriosclerosis, varicose veins, embolism, and cerebral vascular accident?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. American Heart Association Literature and Films
2. Cardiopulmonary resuscitation (CPR) course (8 hours)
3. Assign short report topics such as varicose veins, arteriosclerosis, etc., for classroom presentations.
4. Panel discussion on "How Lifestyle Affects Blood Pressure and Pulse."

ANSWERS TO EVALUATION ITEMS:

1. d
2. a
3. e
4. f

5. c
6. c
7. a
8. b
9. b
10. a
11. d
12. a
13. b
14. b
15. c
16. b
17. b
18. a
19. c
20. d
21. c
22. e
23. f
24. a
25. b
26. d

LESSON PLAN: 10

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with their correct definitions in Column II.

		Column I		Column II
___	1.	Diastolic pressure	a.	A structure which allows the flow of blood or fluid in only one direction
___	2.	Valve	b.	Blood pressure at the moment of contraction
___	3.	Venules	c.	Blood vessel which carries blood away from the heart
___	4.	Arteriole	d.	The force when the ventricles are relaxed
___	5.	Artery	e.	Tiny veins
			f.	Small branch of an artery

Match the following blood vessels in Column I with their correct descriptions in Column II.

		Column I		Column II
___	6.	Arteries	a.	Connect arterioles to venules
___	7.	Capillaries	b.	Carry deoxygenated blood
___	8.	Veins	c.	Carry oxygenated blood

9. The tunica media is which layer of the arterial wall? (Circle the letter of the best answer.)

   a. Outer layer
   b. Middle layer
   c. Inner layer
   d. Third layer

10. ________________ walls are very thin. (Circle the letter of the best answer.)

a. Capillaries
b. Arteries
c. Arterioles
d. Veins

11. ________________ have valves which allow blood to flow in only one direction. (Circle the letter of the best answer.)

a. Capillaries
b. Arteries
c. Arterioles
d. Veins

12. Arterioles branch into: ________________ (Circle the letter of the best answer.)

a. Capillaries
b. Arteries
c. Arterioles
d. Veins

13. What moves into the capillary blood from cells? (Circle the letter of the best answer.)

a. Oxygen
b. Carbon dioxide
c. Carbon monoxide
d. Glucose

14. The largest vein in the body is the ________________. (Circle the letter of the best answer.)

a. Aorta
b. Vena cava
c. Venules
d. Pulmonary

15. Which one of the following is a correct description of blood pressure? (Circle the letter of the best answer.)

a. Blood pressure is the force of blood against the walls of veins.
b. Blood pressure is the force of blood against the walls of capillaries.
c. Blood pressure is the force of blood against the walls of arteries.
d. Blood pressure is the force of blood against the walls of venules.

16. An area where the pulse can be taken is: (Circle the letter of the best answer.)

- a. At the bottom of the foot above the ankle
- b. At the wrist posterior surface of the radius
- c. Behind the ear and under the eye
- d. Above the elbow, along the outer border of the biceps muscle

Match the type of circulation in Column I with the correct description in Column II.

Column I

____ 17. Coronary

____ 18. Systemic

____ 19. Pulmonary

____ 20. Portal

Column II

a. Flow of blood from the left ventricle throughout the body as a whole

b. Circulation of blood to the heart muscle

c. Circulation of blood from right ventricle to the lungs

d. Circulation of blood through the liver

Match the disease or condition in Column I with the correct description in Column II.

Column I

____ 21. Angina pectoris

____ 22. Hypertension

____ 23. Arteriosclerosis

____ 24. Varicose veins

____ 25. Embolism

____ 26. Cerebral vascular accident

Column II

a. Dilated, tortuous veins

b. Floating clot in a vein

c. Blood supply to the heart does not meet the hearts needs

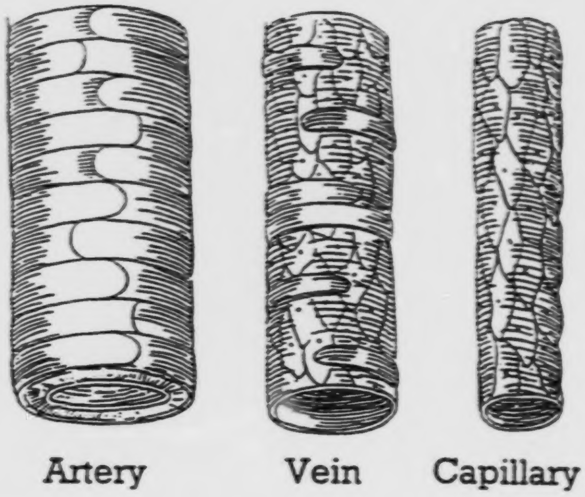
d. Caused by a blockage or rupture of arteries in the brain

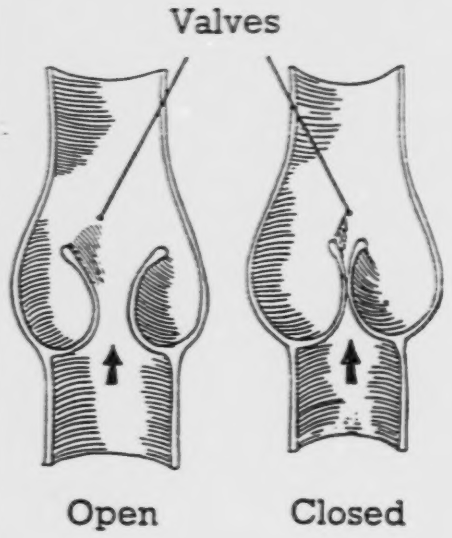
e. High blood pressure

f. Thickening, loss of elasticity, and calcification of arterial walls, resulting in a decreased blood supply

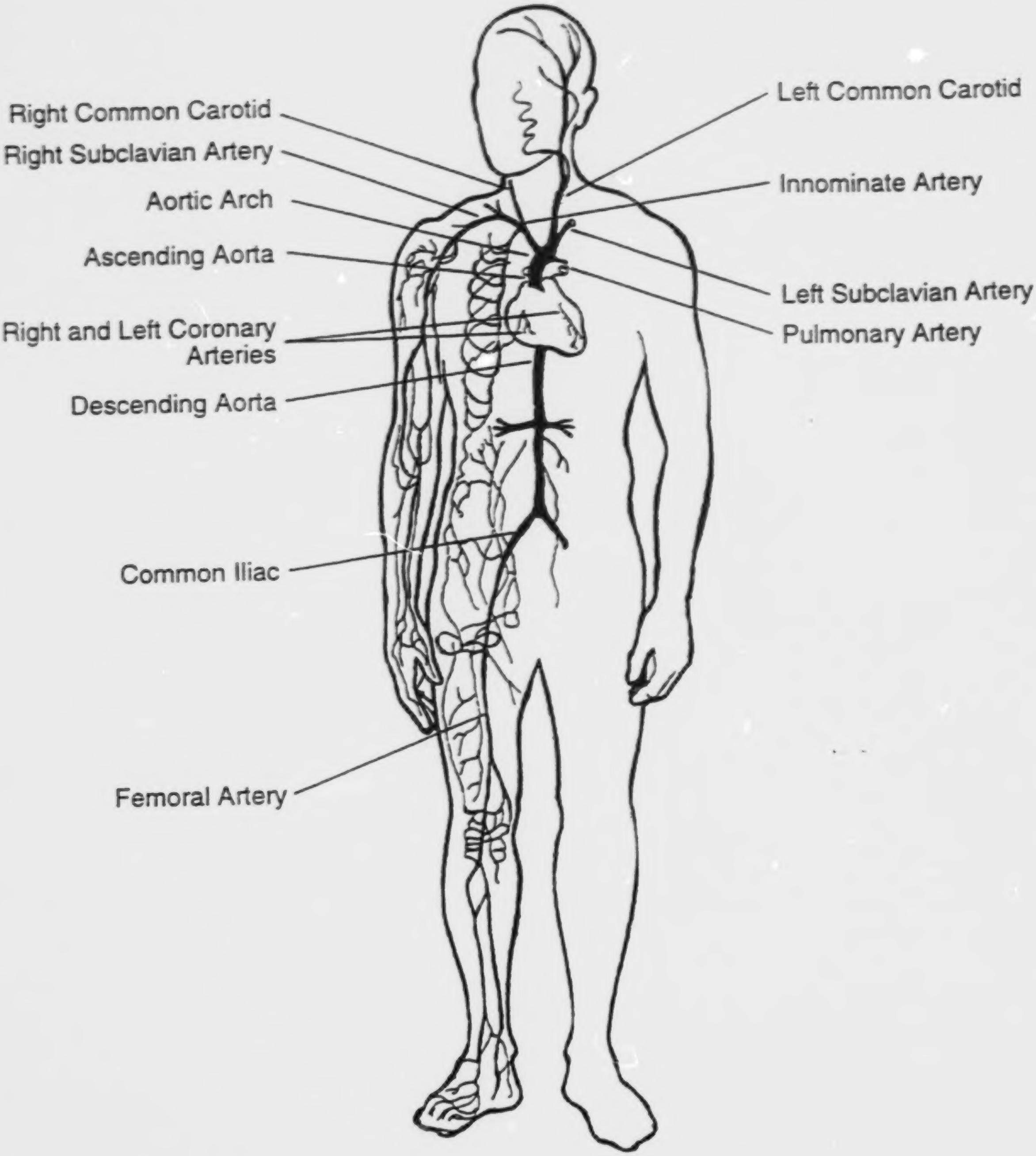
HO 1

BLOOD VESSELS

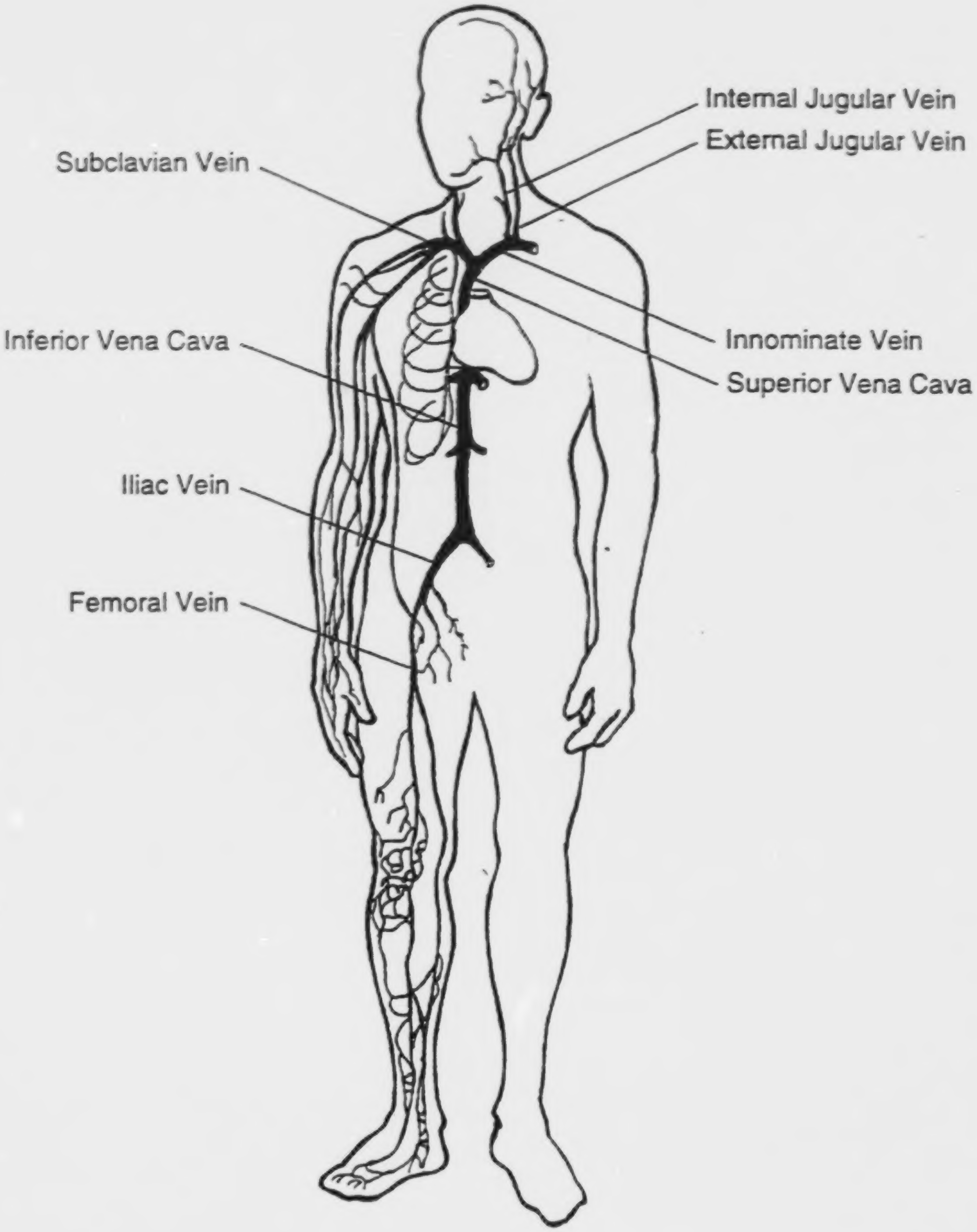

Artery
Vein
Capillary


Valves
Open
Closed

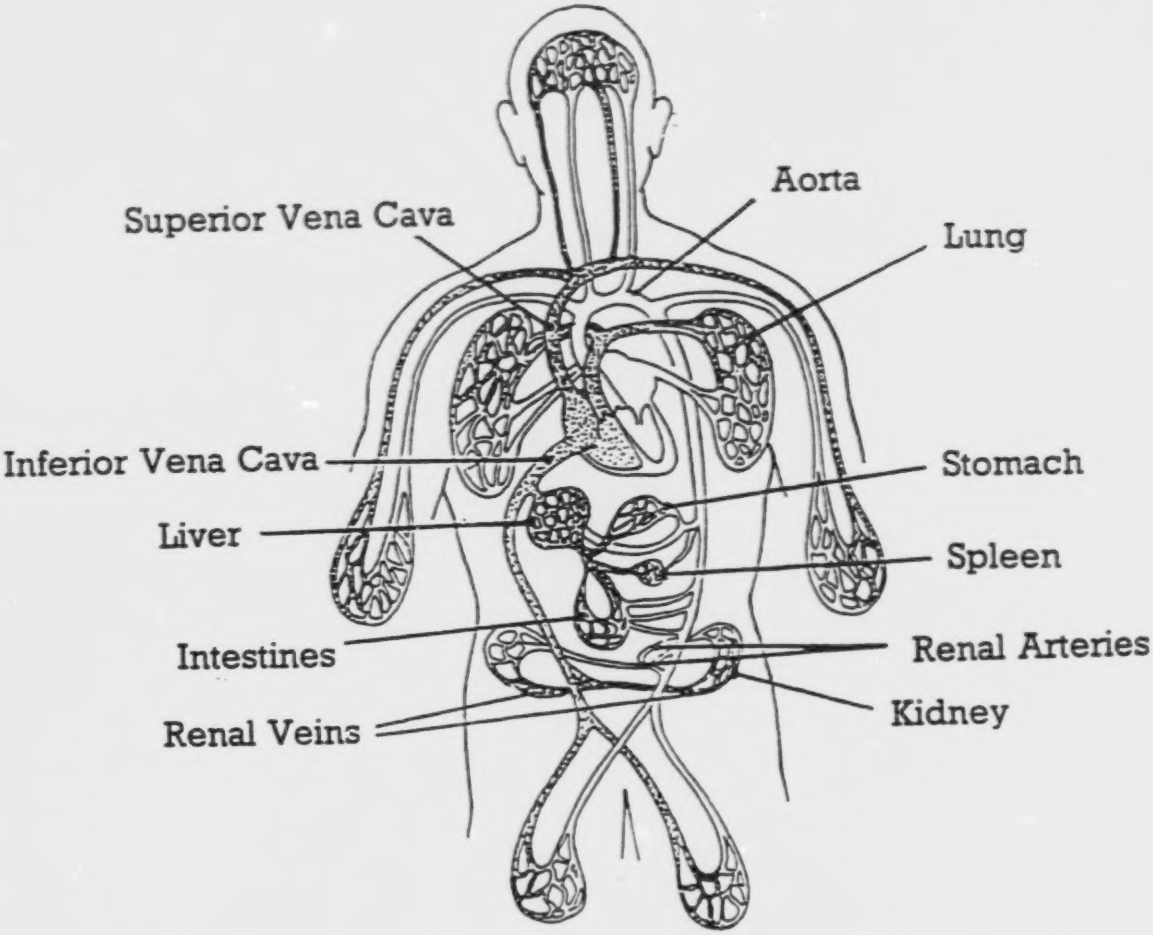
ARTERIES


Right Common Carotid
Right Subclavian Artery
Aortic Arch
Ascending Aorta
Right and Left Coronary Arteries
Descending Aorta
Common Iliac
Femoral Artery
Left Common Carotid
Innominate Artery
Left Subclavian Artery
Pulmonary Artery

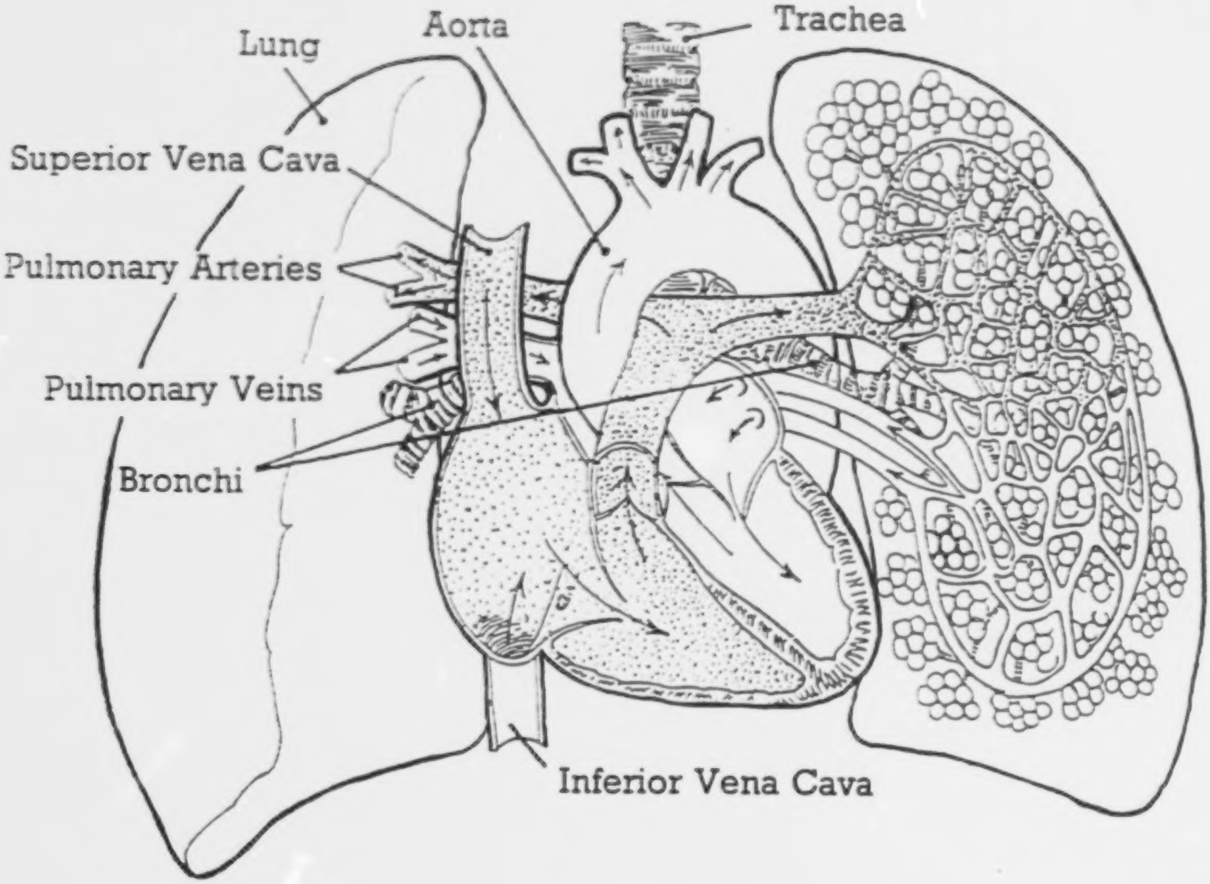
VEINS


Internal Jugular Vein
External Jugular Vein
Subclavian Vein
Inferior Vena Cava
Innominate Vein
Superior Vena Cava
Iliac Vein
Femoral Vein

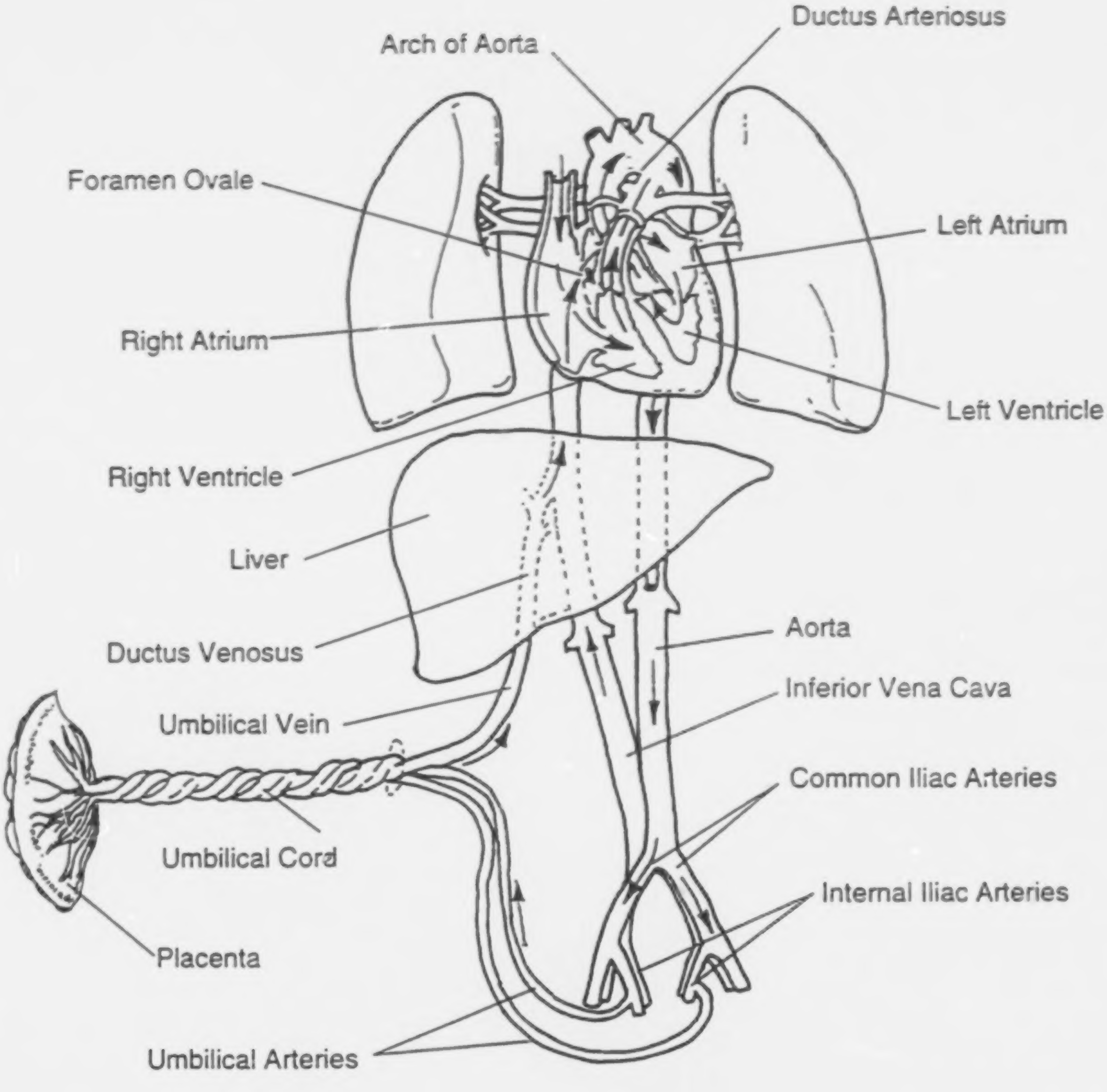
GENERAL OR SYSTEMIC CIRCULATION


Aorta
Superior Vena Cava
Lung
Inferior Vena Cava
Stomach
Liver
Spleen
Intestines
Renal Arteries
Kidney
Renal Veins

PULMONARY CIRCULATION


Lung
Aorta
Trachea
Superior Vena Cava
Pulmonary Arteries
Pulmonary Veins
Bronchi
Inferior Vena Cava

FETAL CIRCULATION


Arch of Aorta
Ductus Arteriosus
Foramen Ovale
Left Atrium
Right Atrium
Left Ventricle
Right Ventricle
Liver
Ductus Venosus
Aorta
Inferior Vena Cava
Umbilical Vein
Common Iliac Arteries
Umbilical Cord
Internal Iliac Arteries
Placenta
Umbilical Arteries

LESSON PLAN: 11

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-11 AND DEMONSTRATION: V-11

BLOOD PRESSURE
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

Information

1. Match terms presented in this lesson to correct definitions.
2. Distinguish between systolic and diastolic blood pressures.
3. Identify the normal range for systolic blood pressure.
4. Identify the normal range for diastolic blood pressure.
5. Identify equipment used to take a blood pressure.
6. Identify key points in measuring blood pressure.
7. Identify improper technique that can result in an inaccurate blood pressure reading.

Demonstration

8. Measure blood pressure using palpation of the brachial artery according to the steps of procedure.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Reading a Mercury Sphygmomanometer
2. HO 2: Reading an Aneroid Sphygmomanometer
3. HO 3: Proper Position for Taking Blood Pressure

4. HO 4: Identifying Improper Techniques for Taking Blood Pressure - Activity Sheet

5. *Nursing Assistant Techniques Measuring: Pulse, Respiration, and Blood Pressure*, video #3, available from the Missouri Vocational Resource Center, 12 min.

6. Television and VCR

7. Sphygmomanometer with blood pressure cuff

8. Stethoscope

9. Alcohol sponges

10. Note pad and pencil

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 11 prior to class and be prepared to discuss the information presented and return the demonstration on taking a blood pressure.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 17.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 4, Section 4.

Hegner, Barbara; Ester Caldwell. *Nursing Assistant, A Nursing Process Approach*. 6th ed. Albany, NY: Delmar Publishers, 1992. Unit 16.

INTRODUCTION:

Blood pressure is one of the vital signs. This procedure requires an understanding of what you are actually listening to and familiarity with the equipment used. Certain factors and improper technique can alter the reading, thus producing an inaccurate measurement. Treatment can be based on BP readings which, if not read correctly, could result in harm to the client. This lesson demonstrates the proper procedure for measuring blood pressure using palpation of the brachial artery. You must practice taking blood pressure readings to become proficient.

LESSON PLAN: 11

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

A. Blood pressure - the amount of force exerted against the walls of an artery by the blood

B. Diastolic pressure - the pressure in the arteries when the heart is at rest

C. Hypertension - high blood pressure; persistent BP measurements above the normal systolic (150 mm Hg) or diastolic (90 mm Hg) pressures

D. Hypotension - low blood pressure; condition in which systolic BP is below 100 mm Hg and diastolic pressure is below 60 mm Hg

E. Palpate - to examine by feeling

F. Sphygmomanometer - instrument used to measure BP that consists of a cuff which is applied to the upper arm, and a measuring device

G. Stethoscope - instrument used to listen to the sounds produced by the heart, lungs, and other body organs

H. Systolic pressure - amount of force it takes to pump blood out of the heart into the arterial circulation

II. Blood Pressure Measurement

A. Blood pressure measurement consists of measuring the systolic and diastolic pressures.

B. Systole is the period of heart muscle contraction. Systolic pressure is the highest pressure and represents the amount of force it takes to pump blood out of the heart into the arteries. **(II-2)**

C. Diastole is the period of heart muscle relaxation. Diastolic pressure is the lowest pressure and represents the amount of pressure in the arteries when the heart is at rest. **(II-3)**

D. Factors that can increase blood pressure measurement

1. Strong emotions
2. Pain

    3. Exercise

    4. Some disease conditions

    5. Some medications

E. Factors that can lower blood pressure measurement

    1. Resting

    2. Depression

    3. Hemorrhage

    4. Shock

    5. Some medications

F. Normal range of blood pressure **(II-4)**

    1. Systolic - 100 to 150 mm Hg

    2. Diastolic - 60 to 90 mm Hg

G. Hypertension - persistent blood pressure measurements above normal systolic and diastolic pressures **(II-5)**

H. Hypotension - persistent blood pressure measurements below normal systolic and diastolic pressures

III. Equipment Used to Take a Blood Pressure Reading

A. Sphygmomanometer

    1. Two types

        a. Mercury manometer - has an upright gauge with a straight column of numbers (HO 1)

            (1) The dial is marked off from zero to 300.

            (2) Heavy dark lines for each 10 points

            (3) Small lines between the large lines represent two point intervals. **(II-6)**

            (4) View it at eye level.

b. Aneroid manometer - has a round gauge with spring type arrow pointing to numbers (HO 2)

    (1) The dial is marked off in unit measurements of 20 to 300. Zero is at the center bottom of the gauge.

    (2) Small lines between the large lines represent two point intervals.

    (3) View it from straight on; do not view it from the side.

2. The mercury column and the needle on the aneroid manometer should be at the zero mark when not in use.

B. Cuff

1. It is a long, wide piece of fabric that is wrapped around the arm and secured with Velcro. It has a rubber bladder at one end that fills with air when bulb is pumped and applies pressure on the artery to stop the flow of blood.

2. Cuff should be placed so that the center of the bag is over the brachial artery about one inch above the elbow. **(II-7)**

3. Cuff should be applied to the bare upper arm; do not apply over clothing. **(II-8)**

4. Cuff should be wrapped snugly but not tightly. Select a cuff that is the appropriate size for the client's arm.

    a. The width of the cuff should measure approximately two-thirds the diameter of the client's arm.

5. Tubing connects the cuff to the manometer and another tube connects the cuff to a small hand-held bulb. A valve on the bulb is turned clockwise to allow inflation of the cuff as the bulb is squeezed. By turning it counter clockwise, it allows deflation of the cuff and measurement of the blood pressure.

C. Stethoscope

1. An instrument that amplifies sound

2. Position the stethoscope for use with the earpieces facing forward. **(II-9)**

3. Use the flat diaphragm side of the stethoscope. Do not place your thumb on the diaphragm. Use fingers to hold the diaphragm in place.

4. Do not put too much pressure on the stethoscope because this will maintain pressure on the artery.

5. Always clean the earpieces with alcohol before and after taking the blood pressure to avoid infection. **(II-10)**

IV. Measuring the Blood Pressure (HO 3)

A. Blood pressure should never be taken on an arm with an IV infusion or a cast.

B. If a client has had breast surgery, blood pressure is not taken on that side.

C. BP is normally measured in the brachial artery of one of the arms.

D. Room should be quiet so that the BP can be heard; talking and noises from T.V. and radio should be stopped.

E. The manometer must be clearly visible.

F. Arm should be supported at heart level.

G. The cuff is inflated while the pulse is checked in order to find the point where the pulse in no longer felt. This will indicate how high the cuff must be inflated so that the systolic pressure is correctly detected. The cuff is inflated only 30mm Hg above this point. This is done to prevent unnecessary discomfort to the client while blood pressure is being taken and to obtain an accurate reading. **(II-11)**

H. Systolic reading is the first sound you hear as you let the air out; blood begins to flow through the artery with force as the heart contracts. **(II-12)**

I. Diastolic reading is the last sound you hear as you let the air out or the point that it changes to a soft, muffled thump, blood flows freely through the artery when the heart relaxes. **(II-13)**

J. If the sounds become muffled before stopping or remain muffled down to zero, record the diastolic at the point when you hear the change from clear to muffled, and when the sound ends. For example, 136/74/72

K. If you need to repeat the procedure, you must wait 15 seconds for the artery to regain its original elasticity before measuring the pressure again. **(II-14)**

V. Improper Technique that Can Result in an Inaccurate Blood Pressure Reading (HO 4)

A. The arm is not supported at the heart level; the arm should always be supported at heart level. **(II-15)**

B. The manometer is turned to where it can not be seen clearly.

C. The thumb is on the diaphragm on the stethoscope or too much pressure is being applied.

D. The blood pressure cuff is not completely deflated before the procedure is begun.

    E. The blood pressure cuff is not properly placed over the brachial artery.

    F. The blood pressure cuff is placed over clothing.

    G. Surrounding noise interfering with the detection of the systolic and diastolic pulse sounds.

    H. Repeating the blood pressure procedure before waiting 15 seconds.

    I. Client is wearing restrictive clothing, such as belts or tight garments.

    J. Client's legs are crossed.

    K. The cuff is the wrong size.

VI. Demonstrate Procedure for Measuring Blood Pressure.

VII. Summary and Conclusion

    A. Terms and definitions

    B. Blood pressure measurement

    C. Equipment used to take a blood pressure reading

    D. Measuring blood pressure

    E. Factors and improper technique that can result in an inaccurate blood pressure reading

    F. Review procedure for taking blood pressure.

The next lesson is on temperature, pulse, and respirations.

LESSON PLAN: 11

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

STEPS OF PROCEDURE FOR MEASURING BLOOD PRESSURE USING PALPATION OF THE BRACHIAL ARTERY:

1. Wash your hands.
2. Assemble necessary equipment.
3. Identify and greet client. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Position client seated/reclining with the entire lower arm on a flat surface, palm upward.
7. Expose the arm as much as possible. Squeeze the cuff to expel any remaining air and turn the valve clockwise on the bulb to close it.

   NOTE: Do not turn it too tightly or you will have trouble opening it.
8. Locate the brachial artery. Center the bladder of the cuff approximately 1 inch (2.5 cm) above the side where the brachial pulse was felt.
9. Wrap the cuff snugly around the arm.
10. Make sure that the manometer is vertical and at eye level.
11. Palpate the brachial or radial pulse with one hand. Close the screw clamp on the bulb and inflate the cuff while still checking the pulse with the other hand. Observe the point where the pulse is no longer felt.
12. Open screw clamp, deflate the cuff, and wait 30 seconds.
13. Position stethoscope ear pieces in your ears and place the diaphragm of the stethoscope over the brachial pulse.

    NOTE: Do not hold the bell in place with your thumb. Use fingers.
14. Hold the rubber bulb in the palm of the hand that is not holding the stethoscope.
15. Quickly inflate the cuff with air by squeezing the bulb to a pressure 30 mm Hg above the point where the pulse disappeared.

16. Slightly loosen the valve counterclockwise. Deflate the cuff slowly and steadily. Listen carefully and watch the column of mercury or aneroid needle gauge for points where you hear the first sound.

17. Note the systolic and diastolic readings.

18. Deflate the cuff completely when all sounds stop and remove it from the client's arm.

19. Record blood pressure reading on paper.

20. Remove, clean, and store equipment.

21. Wash your hands.

22. Make the client comfortable; place call signal within reach if indicated.

23. Record observations and report anything unusual to the appropriate person.

LESSON PLAN: 11

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms presented in this lesson?
2. What happens to heart muscle during the systolic phase?
3. What happens to heart muscle during the diastolic phase?
4. What is the normal systolic and diastolic blood pressure range?
5. What is the difference between hypertension and hypotension?
6. Each small line on the manometer indicates how many points?
7. Over what artery do you usually place the cuff?
8. Is it appropriate to take a blood pressure with clothing covering the arm?
9. Which direction should the earpieces be facing when putting on a stethoscope?
10. Why should you clean the earpieces on the stethoscope before and after measuring a client's blood pressure?
11. Why do you pump the cuff to 30 mm Hg above where you last felt the client's pulse?
12. At what point is the systolic reading noted?
13. At what point is the diastolic reading noted?
14. If you need to repeat the procedure, why must you wait 15 seconds?
15. What position should the client be in when having his/her blood pressured measured?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Instructor shows students equipment used to take a blood pressure reading.
2. Have students complete HOs 1, 2, & 4 for measuring blood pressure.
3. Show video.
4. Show students a diagram of the ear.

5. Instructor demonstrates how to take blood pressure.

6. Students practice taking each other's blood pressure.

ANSWERS TO IMPROPER TECHNIQUE FOR TAKING BLOOD PRESSURE - ACTIVITY SHEET (HO 4)

1. Blood pressure was measured over Ms. Solaris' clothing.
2. The manometer is backwards.
3. The blood pressure cuff is not over the brachial artery.
4. The assistant's thumb is on the stethoscope.
5. The arm is below the heart level.
6. The waiting room is crowded and noisy.

ANSWERS TO EVALUATION ITEMS:

1. f
2. d
3. g
4. c
5. a
6. b
7. e
8. d
9. d
10. b
11. b
12. a
13. c
14. b
15. c
16. Forward
17. Systolic
18. Diastolic
19. a
20. c
21. Counterclockwise
22. c
23. c

LESSON PLAN: 11

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I to the correct definitions in Column II by writing the letter in the blank.

Column I

___ 1. Sphygmomanometer
___ 2. Diastolic pressure
___ 3. Stethoscope
___ 4. Blood pressure
___ 5. Systolic pressure
___ 6. Hypertension
___ 7. Hypotension

Column II

a. Amount of force necessary to pump blood out of the heart into the arterial circulation

b. High blood pressure

c. Amount of force exerted against the walls of an artery by the blood

d. Pressure in the arteries when the heart is at rest

e. Low blood pressure

f. Used to measure BP; includes cuff and a measuring device

g. Used to listen to the sounds produced by the heart, lungs, and other body organs

8. The first sound you hear when taking a blood pressure is called: (Circle the letter of the best answer.)

   a. Blood pressure reading.
   b. Diastolic reading.
   c. Hypertension reading.
   d. Systolic reading.

9. During the systolic phase, the heart muscle is: (Circle the letter of the best answer.)

   a. Relaxed.
   b. Extended.
   c. Retracted.
   d. Contracted.

10. The normal systolic range of blood pressure is: (Circle the letter of the best answer.)

    a. 150 to 200 mm Hg.
    b. 100 to 150 mm Hg.
    c. 60 to 90 mm Hg.
    d. 160 to 170 mm Hg.

11. The normal diastolic range of blood pressure is: (Circle the letter of the best answer.)

    a. 100 to 150 mm Hg.
    b. 60 to 90 mm Hg.
    c. 40 to 50 mm Hg.
    d. 150 to 200 mm Hg.

12. Hypertension is defined as: (Circle the letter of the best answer.)

    a. Above normal systolic and diastolic pressure.
    b. Just normal diastolic and systolic pressure.
    c. An elevated pulse rate and cardiac output.
    d. Below normal systolic and diastolic pressure.

13. How many points does each small line on the manometer indicate? (Circle the letter of the best answer.)

    a. 10 points
    b. 1 point
    c. 2 points
    d. 5 points

14. When taking a blood pressure, the cuff is usually placed over the: (Circle the letter of the best answer.)

    a. Carotid artery.
    b. Brachial artery.
    c. Radial artery.
    d. Pulmonary artery.

15. The blood pressure cuff should be applied: (Circle the letter of the best answer.)

    a. Loosely.
    b. Over clothing.
    c. On bare skin.
    d. Very tight.

16. When positioning the earpieces of a stethoscope, they should be facing ____________________.

17. The first sound you hear as you let the air out of the blood pressure cuff is the ____________________ reading.

18. The last sound you hear as you let the air out of the blood pressure cuff is the ____________________ reading.

19. When taking a client's blood pressure, the arm should be positioned: (Circle the letter of the best answer.)

    a. With the lower arm on a flat surface, palm upward.
    b. With the lower arm suspended in air, bend of elbow exposed.
    c. With the upper arm above the level of the heart, rotated inward.
    d. With the lower arm hanging straight down, palm inward.

20. Which one of the following is correct procedure when measuring a blood pressure? (Circle the letter of the best answer.)

    a. There is no need to clean earpieces with an alcohol sponge.
    b. Hold the bell of the stethoscope in place with your thumb.
    c. Hold the bell of the stethoscope in place with your fingers.
    d. Inflate the cuff with air by pumping the bulb to 120 mm Hg.

21. When measuring a blood pressure the valve is loosened by turning it ____________________.

22. When measuring a blood pressure, what should you do if you hear pulse sounds immediately after opening the valve? (Circle the letter of the best answer.)

    a. Deflate the cuff and immediately retake the blood pressure.
    b. Go get the charge nurse to take the blood pressure.
    c. Stop the procedure, remove cuff, wait 15 seconds before retaking.
    d. Stop the procedure, put machine away, and come back in one hour.

23. Which one of the following pieces of equipment is not needed to take a blood pressure? (Circle the letter of the best answer.)

    a. Sphygmomanometer
    b. Stethoscope
    c. Otoscope
    d. Cuff

LESSON PLAN: 11

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

NAME OF STUDENT: ______________

MEASURE BLOOD PRESSURE USING PALPATION OF THE BRACHIAL ARTERY

EQUIPMENT:

1. Sphygmomanometer
2. Stethoscope
3. Alcohol sponges
4. Note pad and pencil

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash your hands.		
2. Assemble necessary equipment.		
3. Identify and greet client. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Position client seated/reclining with the entire lower arm on a flat surface, palm upward.		
7. Expose the arm as much as possible. Squeeze the cuff to expel any remaining air and turn the valve clockwise on the bulb to close it. NOTE: Do not turn it too tightly or you will have trouble opening it.		
8. Locate the brachial artery. Center the bladder of the cuff approximately 1 inch (2.5 cm) above the side where the brachial artery pulse was felt.		
9. Wrap the cuff snugly around the arm.		
10. Make sure that the manometer is vertical and at eye level.		
11. Palpate the brachial or radial pulse with one hand. Close the screw clamp on the bulb and inflate the cuff while still checking the pulse with the other hand. Observe the point where the pulse is no longer felt.		
12. Open screw clamp, deflate the cuff, and wait 30 seconds.		

13.	Position the stethoscope ear pieces in your ears and place the diaphragm of the stethoscope over the brachial pulse. NOTE: Do not hold the bell in place with your thumb. Use fingers.		
14.	Hold the rubber bulb in the palm of the hand that is not holding the stethoscope.		
15.	Quickly inflate the cuff with air by squeezing the bulb to a pressure 30mm Hg above the point where the pulse disappeared.		
16.	Slightly loosen the valve counterclockwise. Deflate the cuff slowly and steadily. Listen carefully and watch the column of mercury or aneroid needle gauge for points where you hear the first sound.		
17.	Note the systolic and diastolic readings.		
18.	Deflate the cuff completely when all sounds stop and remove it from the client's arm.		
19.	Record blood pressure reading on paper.		
20.	Remove, clean, and store equipment.		
21.	Wash your hands.		
22.	Make the client comfortable; place call signal within reach.		
23.	Record observations and report anything unusual to the appropriate person.		

The student has satisfactorily completed the procedure "MEASURE BLOOD PRESSURE USING PALPATION OF THE BRACHIAL ARTERY" according to the steps outlined.

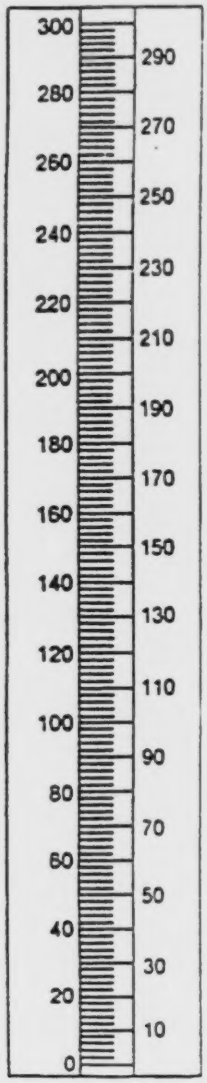
Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

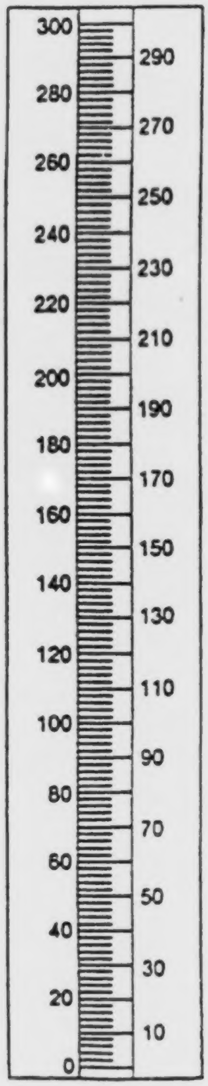
READING A MERCURY SPHYGMOMANOMETER

Beside each sphygmomanometer gauge is a BP reading: the systolic and diastolic numbers. Mark the gauge by extending a line out from the correct systolic reading and a line out from the correct diastolic reading. Note: Each line on the gauge represents 2/10 mm. Hg.

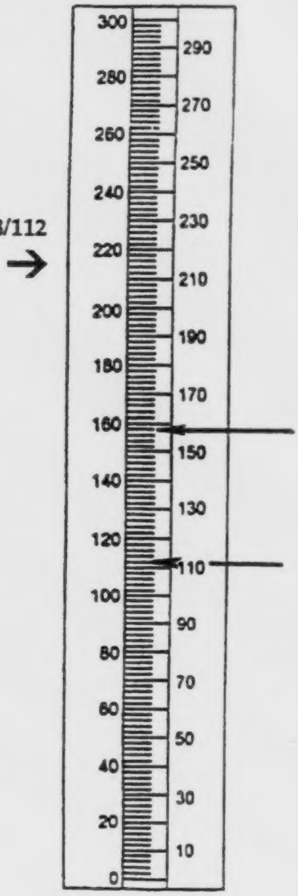
BP 158/112
→


300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0

BP 92/48
→

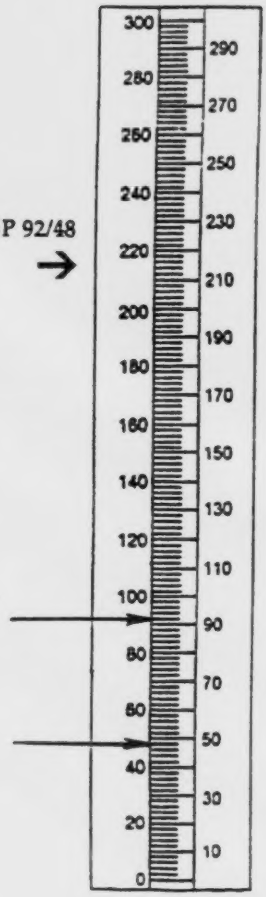

300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0

ANSWERS



BP 158/112

300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0



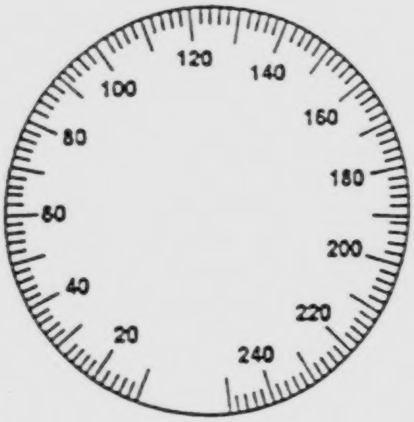
BP 92/48

300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0

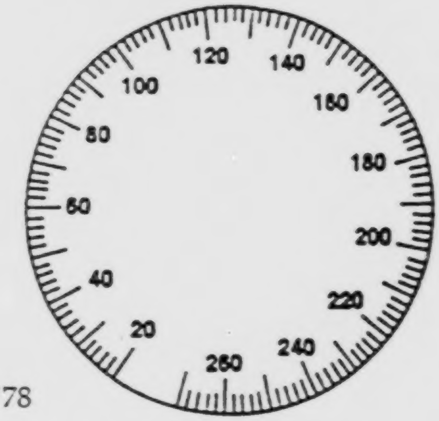
HO 2

READING AN ANEROID SPHYGMOMANOMETER

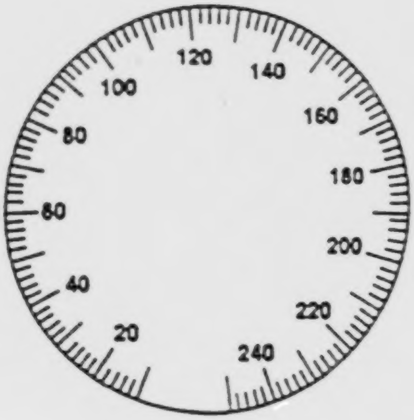
Beside each sphygmomanometer gauge is a BP reading: the systolic and diastolic numbers. Mark the gauge by extending a line out from the correct systolic reading and a line from the correct diastolic reading. Note: Each line on the gauge represents 2/10 mm. Hg.


20
40
60
80
100
120
140
160
180
200
220
240

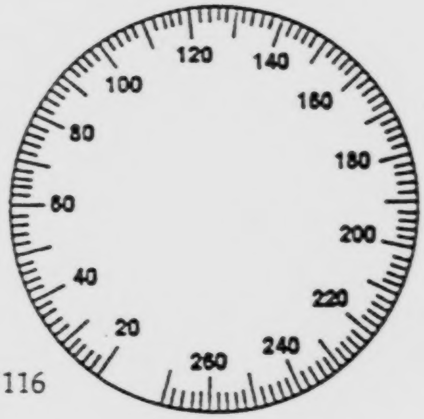
158/102


20
40
60
80
100
120
140
160
180
200
220
240
260

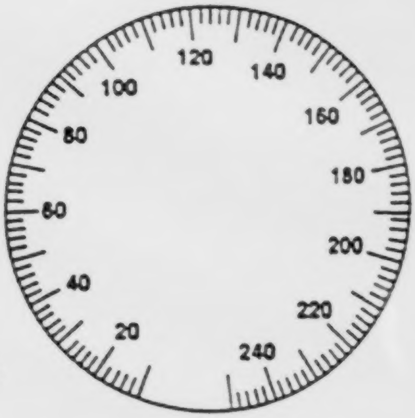
92/78


20
40
60
80
100
120
140
160
180
200
220
240

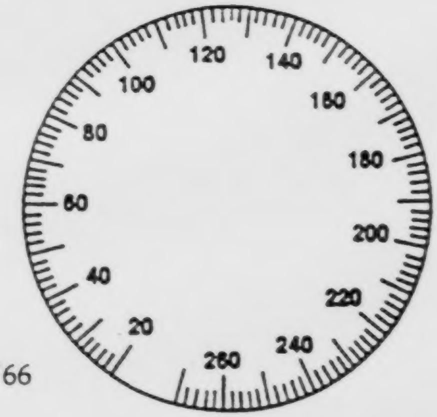
92/48


20
40
60
80
100
120
140
160
180
200
220
240
260

182/116

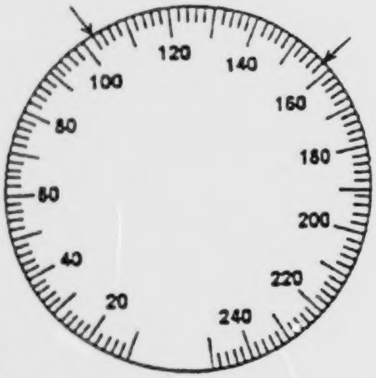

20
40
60
80
100
120
140
160
180
200
220
240

220/108

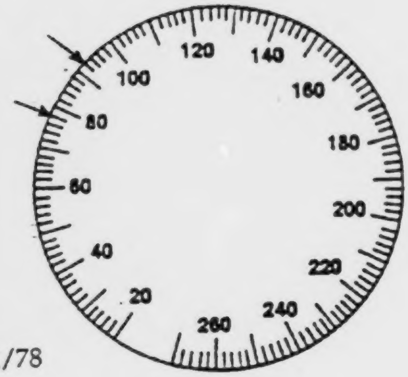

20
40
60
80
100
120
140
160
180
200
220
240
260

82/66

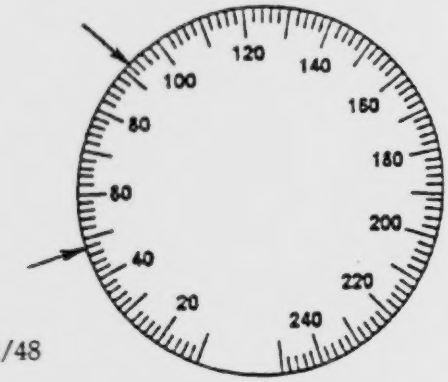
ANSWERS


120
140
100
160
80
180
60
200
40
220
20
240

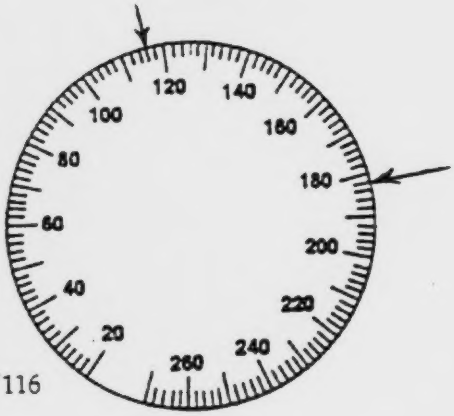
158/102


120
140
100
160
80
180
60
200
40
220
20
240
260

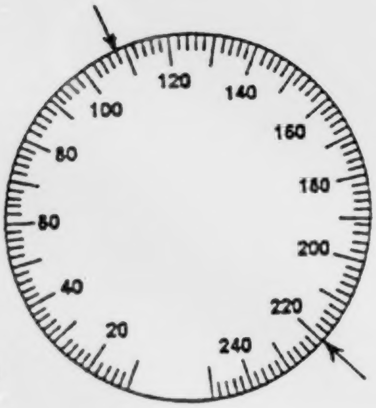
92/78


120
140
100
160
80
180
60
200
40
220
20
240

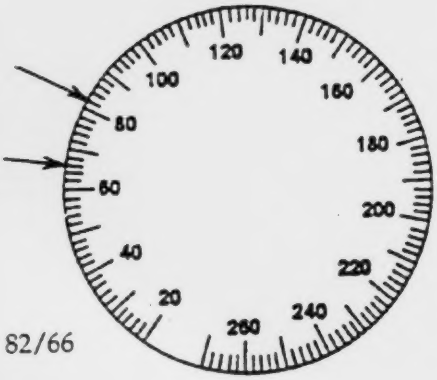
92/48


120
140
100
160
80
180
60
200
40
220
20
240
260

182/116

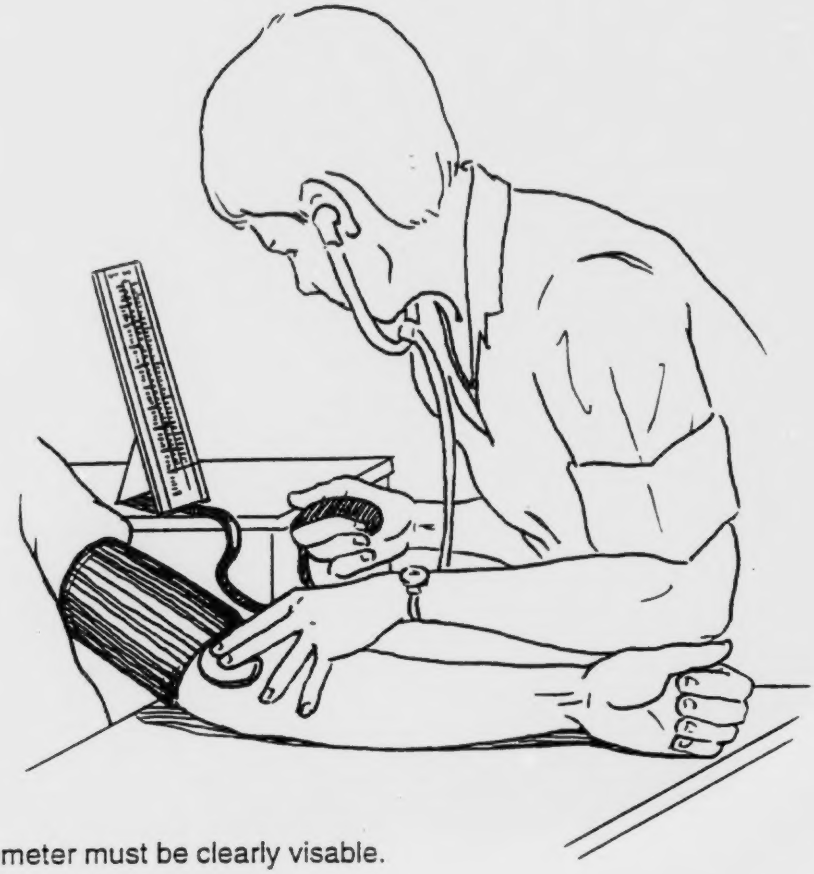

120
140
100
160
80
180
60
200
40
220
20
240

220/108


120
140
100
160
80
180
60
200
40
220
20
240
260

82/66

PROPER POSITION FOR TAKING BLOOD PRESSURE

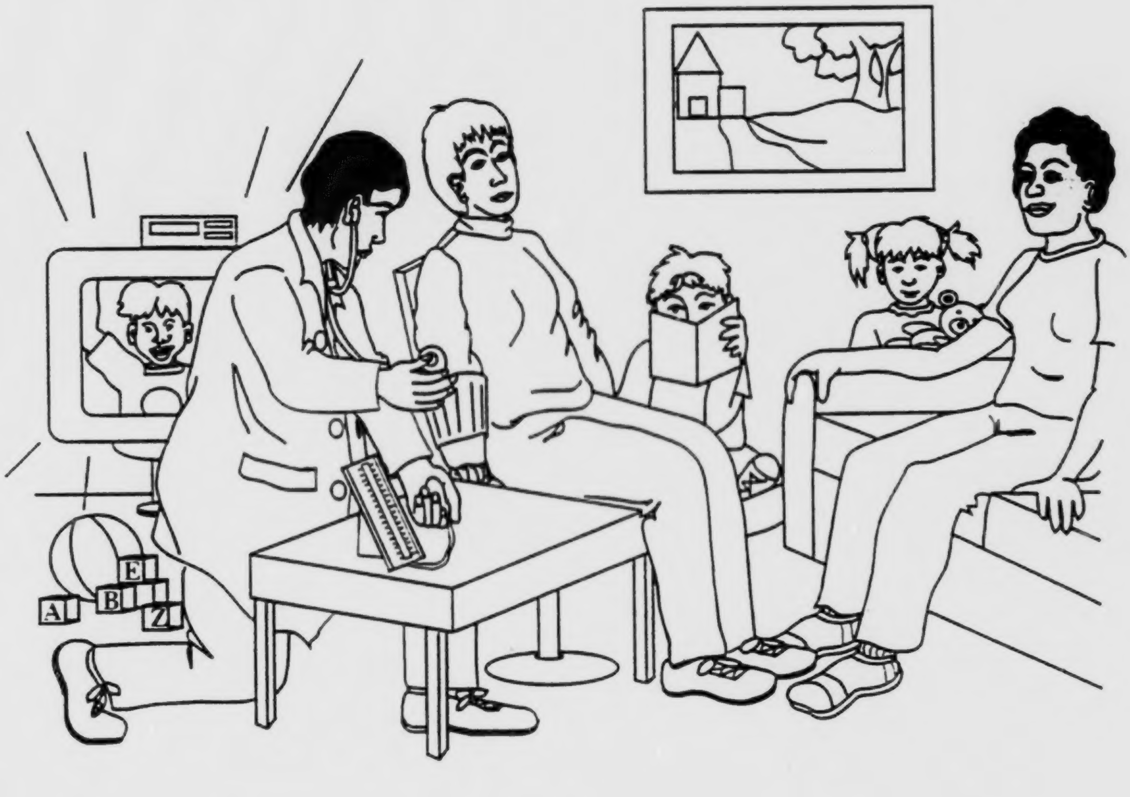


- The manometer must be clearly visable.
- Rest lower arm on chair, table or bed with palm upward.
- Hold the diaphragm of the stethoscope with your fingers, not with your thumb.

HO 4

IDENTIFYING IMPROPER TECHNIQUES FOR TAKING BLOOD PRESSURE - ACTIVITY SHEET

Ms. Solaris is being seen by a physician for hypertension. She comes to the office weekly to have her blood pressure monitored by the Administrative Medical Assistant. On Monday, Ms. Solaris hurried into the office to have her blood pressure checked. All of the examination rooms were full, so the assistant proceeded to measure her blood pressure in the busy waiting room. How many technique errors can you find in the following picture that could cause the assistant to obtain an inaccurate blood pressure reading?



LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-12 AND DEMONSTRATION: V-12

TEMPERATURE, PULSE, AND RESPIRATION (TPR)
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

Information

1. Match terms presented in this lesson to correct definitions.
2. Identify the normal range of body temperature for elderly persons.
3. Identify three types of thermometers.
4. Identify four ways to take a temperature.
5. Determine the appropriate route for taking temperature.
6. Describe the length of time to take a temperature for each route.
7. Identify the normal pulse range for the elderly adult.
8. List five locations at which a pulse can be checked.
9. Identify the normal range for respirations.
10. List three signs of normal respirations.

Demonstration

11. Take oral temperature according to the steps of procedure.
12. Take rectal temperature according to the steps of procedure.
13. Take axillary temperature according to the steps of procedure.

14. Count radial pulse according to the steps of procedure.

15. Count respirations according to the steps of procedure.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Common Thermometers (Fahrenheit)

2. HO 2: Sites for Taking a Pulse

3. HO 3: The Circulatory System Primary Pulse Points

4. HO 4: Reading a Thermometer

5. *Nursing Assistant Techniques; Measuring Temperature*, video #2, available from the Missouri Vocational Resource Center, 16 min.

6. Glass oral thermometer and holder

7. Glass rectal thermometer and holder

8. Electronic thermometer with oral and rectal probes and disposable probe covers

9. Tympanic thermometer

10. Tissues

11. Plastic thermometer cover (if available)

12. Paper and pen

13. Water-soluble lubricant

14. Disposable gloves, if available

15. Towel

16. Chase doll

17. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 12 prior to class and be prepared to discuss the information presented and return the demonstrations on taking TPR according to the steps of procedure. Have students do thermometer reading exercise HO 4.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 17.

Burnside, Irene M. *Nursing and the Aged*. Hightstown, NJ: McGraw-Hill Publishing Co., 1988.

Eliopoulos, Charlotte. *Gerontology Nursing*. 2nd ed. Philadelphia, PA: J.B. Lippincott Co., 1987. Chapter 17.

Hegner, Barbara; Ester Caldwell. *Nursing Assistant, A Nursing Process Approach*. 5th ed. Albany, NY: Delmar Publishers, 1991. Units 14 and 15.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 4, Section 4.

Sorrentino, Sheila A. *Textbook for Nursing Assistants*, 3rd ed. St. Louis, MO: Mosby-Year Book, Inc., 1992. Chapter 17.

INTRODUCTION:

Taking temperature, pulse, and respirations are part of checking vital signs. This is a procedure that you must completely understand how to perform so that you will feel confident and be accurate. Some medications and treatments may be administered or discontinued depending upon what the vital signs are. If you are ever in doubt, ask the charge nurse to recheck your reading. The following lesson plan will give you some of the answers as to why these are considered the signs of life and will then inform you of the actual steps of the procedures.

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

  A. Axilla - armpit

  B. Body temperature - the amount of heat in the body that is a balance between the amount of heat produced and the amount lost by the body

  C. Bradycardia - abnormally slow heart beat; below 60 beats per minute

  D. Cheyne-Stokes - a pattern of breathing in which respirations gradually increase in rate and depth and then become shallow and slow; breathing may stop for 10 to 20 seconds

  E. Pulse - the beat of the heart felt at an artery as a wave of blood passes through the artery

  F. Pulse rate - the number of heartbeats or pulses felt in one minute

  G. Respirations - act of breathing in and out of the lungs (inhalation/exhalation)

  H. Tachycardia - abnormally fast heart beat

  I. Vital signs - temperature, pulse, respirations, and blood pressure

II. Body Temperature

  A. A balance between heat gained and heat lost

  B. Normal oral temperature range for a resting younger adult is 97.0°F to 99.0°F.

  C. Average oral temperature of elderly persons is 96.8°F. Normal body temperature in the aged may be as low as 95.0°. A temperature of 98.0°F would be a severe elevation for that particular client, but it could be missed because it is a low normal reading for younger adults. Such a missed diagnosis can delay correction of the problem. All nursing staff should understand that a lower body temperature in an aged individual can be the normal value for that person. **(II-2)**

  D. Heat is conserved by the body as follows:

    1. Reduction of perspiration

    2. Vasoconstriction - decrease in flow of blood to skin

3. Shivering - increased muscle activity to produce heat

E. Heat is lost by the body as follows:

1. Vasodilation - increased blood flow to skin, flushed appearance

2. Through the lungs by breathing - increased respirations rate

3. Elimination of urine, stool, and perspiration

F. Fever - an elevation of the body temperature above the usual normal range

G. Measures to raise body temperature

1. Increase the temperature of the room.

2. Add coverings to the body.

3. Provide hot liquids to drink.

4. Give warm bath or soaks.

H. Measures to lower body temperature

1. Decrease the temperature of the room.

2. Remove coverings from the body.

3. Offer cool liquids to drink.

4. Provide cool bath or sponging.

5. Direct fan toward the body.

I. An axillary reading is approximately one degree lower than an oral temperature reading. A rectal reading is approximately one degree higher than an oral temperature reading.

III. Measuring Body Temperature

A. Types of thermometers: (HO 1) **(II-3)**

1. Glass with long, narrow tip

a. Used for oral or axillary temperatures

b. Color-coded blue

c. Never used to take rectal temperature because it could injure tissues in the rectum

2. Glass with rounded, stubby tip
    a. Used for taking rectal temperature
    b. Color-coded red
3. Electronic
    a. Portable and battery operated
    b. Measures temperature within 2 to 60 seconds, depending upon model.
    c. Displays temperatures digitally on front of thermometer unit.
    d. Oral and rectal probes are supplied.
    e. Disposable cover or sheath is used to cover the probe.
    f. Use the cover only once and then discard. **(II-4)**
4. Tympanic or aural ear method
    a. This is the newest method of taking a temperature.
    b. The aural thermometer measures the temperature from blood vessels in the tympanic membrane in the ear.
    c. The instrument has a built-in converter that provides the equivalent temperature in rectal or oral values.
    d. There is less chance of spreading infection with this method because the ear is lined with skin instead of mucous membrane.
    e. It must be positioned properly to obtain an accurate reading.

B. Reading a glass Fahrenheit scale thermometer

1. The thermometer has a bulb end and a stem end.
2. Mercury collects in the bulb end; when warmed, it rises up a hollow tube in the stem of the thermometer. **(II-5)**
3. The temperature is recorded at the point the mercury stops.
4. Hold the thermometer at the stem end; NEVER AT THE BULB END.
5. Stand with your back to the light.
6. Hold thermometer at eye level and rotate it slightly back and forth until the column of mercury is visible.

7. Each long line represents one degree - 94°, 95°, etc.

8. Odd-numbered degrees (95°, 97°, etc.) are not written on the thermometer.

9. Each short mark is two-tenths of a degree; they go from 2/10 to 8/10 between the larger numbers.

10. Two-tenths means the same whether it is written as 2/10 or .2.

11. The small arrow at 98.6°F indicates the normal oral temperature of a young adult **(II-6)**

IV. Ways to Take a Temperature

A. Oral

1. For the elderly, the oral method is the most common and most accurate for assessment purposes (if your client is able to hold a thermometer in place under the tongue).

2. Time required for an accurate reading is five to eight minutes. **(II-7)**

3. DO NOT TAKE AN ORAL TEMPERATURE IF THE CLIENT:

a. Has been smoking, chewing gum, or consumed a hot/cold beverage; wait 30 minutes before taking **(II-8)**

b. Is unconscious **(II-9)**

c. Has had surgery or an injury to the face, neck, nose, or mouth

d. Is receiving oxygen

e. Breathes through the mouth instead of the nose

f. Is delirious, restless, confused, or disoriented

g. Is paralyzed on one side of the body due to a stroke

h. Is an infant or child under five years of age

4. Instruct client not to talk during procedure.

B. Rectal

1. Reduced blood flow to the lower bowel and the possible presence of feces may cause inaccurate rectal temperature readings. This route is not routinely used except when oral temperature cannot be taken for reason(s) listed above.

2. Time required for an accurate reading is three to four minutes. **(II-10)**

3. Client should not be left alone during procedure; thermometer should always be held while temperature is being taken with client on his/her side while the health care assistant holds the top hip in place to prevent client from rolling back.

4. Lubrication of thermometer is important so that it can be inserted easily and not cause tissue injury. **(II-11)**

5. DO NOT TAKE A RECTAL TEMPERATURE IF THE CLIENT:

   a. Has diarrhea

   b. Has a rectal disorder, injury, or recent rectal surgery

6. In charting, indicate rectal method by writing "R" after the numbers; for example 99 R. **(II-12)**

C. Axillary

1. Used when the temperature cannot be taken orally or rectally.

2. Time required for an accurate reading is 10 to 12 minutes.

3. This method should not be used immediately after bathing; the axilla should be dry. Thermometer should be held in place to maintain proper position. Hold the upper arm against the body.

4. In charting, indicate axillary method by writing "A" after the numbers; for example 96.8 A.

D. Tympanic or aural ear method

1. Newest method - facilities may not have this type of thermometer available for daily use.

2. An accurate reading can be obtained in less than one minute if the probe is properly placed.

V. Pulse

A. Pulse is the beat of the heart felt at an artery as a wave of blood passes through the artery; a pulse can be felt every time the heart beats. The rate varies with different age groups. **(II-13)**

1. Newborn - 70-170 beats per minute

2. Infant - 80-130 beats per minute

3. Toddler - 80-120 beats per minute

4. School age - 70-110 beats per minute

5. Adult - 60-100 beats per minute

6. Elderly adult - 50-100 beats per minute.

B. When taking the pulse, count the rate for one full minute.

C. Factors that elevate the pulse

1. Exercise

2. Strong emotion (anger, fear, etc.)

3. Fever

4. Pain

5. Shock

D. Factors that lower the pulse

1. Resting

2. Depression

3. Certain drugs (such as digitalis)

E. When taking the pulse, note the rhythm of the pulse.

1. Regular rhythm - pulse is felt in a pattern with the same time interval occurring between beats

2. Irregular rhythm - noted when the beats are unevenly spaced or beats are skipped

F. When taking the pulse, note the force of the pulse.

1. A forceful pulse is easy to feel and is described as being strong, full, or bounding.

2. A weak pulse is hard to feel and is described as weak or thready.

VI. Sites For Taking Pulse (HO 2) **(II-14)**

A. Radial pulse

1. Most common and convenient site.

2. Pulse is located on the side of the wrist near the client's thumb; it can be felt by placing the first three fingers of one hand against the radial artery.

3. Do not take the pulse with your thumb because it has a pulse of its own. which could be mistaken for the client's pulse.

4. It is routine to take a client's pulse and respirations while taking the temperature.

5. Do not record the pulse immediately; keep the number in mind and continue holding the client's hand until you have counted the respirations.

B. Carotid pulse

1. Located on the side of the neck

2. Check one side at a time; never push on both carotid arteries at the same time--this will cause fainting.

3. Not a preferred method for elderly

C. Brachial pulse - located at the bend of the elbow

D. Femoral pulse - located at the groin area

E. Apical pulse

1. Located on the left side of the chest slightly below the nipple; must use a stethoscope **(II-15)**

2. The heartbeat normally sounds like a "lub-dub." Each "lub-dub" is counted as one beat.

3. Use if radial pulse is difficult to take

VII. Respirations

A. One respiration includes breathing in and breathing out; the chest rises upon inhalation and falls during exhalation.

B. Respiratory rate is the number of respirations in one minute; the normal range for an adult is between 14 and 20. Report to the charge nurse if respirations do not fall within this range. **(II-16)**

C. The respiratory rate is affected by the same factors as those that can elevate/lower the pulse.

VIII. Measuring Respirations

A. Normal respirations are: **(II-17)**

1. Quiet

2. Effortless

3. Regular

4. Both sides of chest rise and fall equally

B. To count respirations, you must be able to see the chest rise and fall. The client must not be aware that you are counting respirations because he/she may subconsciously or intentionally alter the pattern.

C. Count the respirations right after counting the pulse; the fingers should be left in place over the pulse site, thus the client will assume that the pulse is still being counted.

IX. Demonstrate Procedures for Taking TPR. **(II-20 - 28)**

X. Summary and Conclusion

A. Terms and definitions

B. Body temperature

C. Measuring body temperature

D. Ways to make a temperature

E. Pulse

F. Sites for taking a pulse

G. Respirations

H. Measuring respirations

I. Review procedures for taking TPR.

Taking the TPR contributes to the overall evaluation of the client's condition. It should be done with great accuracy and whenever there is an indication of change of condition. Most long-term care facilities check the client's TPR at least once a month. In acute care, the client's vital signs are taken more often as ordered by the physician, sometimes as often as every 15 minutes. The next unit will be on the respiratory system.

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

STEPS OF PROCEDURE FOR TAKING ORAL TEMPERATURE:

1. Wash your hands. Put on gloves.
2. Assemble necessary equipment.
3. Identify and greet client. Identify self.
4. Explain what you are going to do.
5. Provide privacy.
6. Client should be in sitting/lying down position.
7. Using a glass bulb thermometer
    a. Rinse thermometer with cool water if it has been soaked in disinfectant solution.
    b. Check thermometer for breaks or chips.
    c. Shake down thermometer to 94°F or below; firmly grasp at the stem end and snap your wrist several times.
    d. Ask client to open mouth and raise tongue. Place the thermometer bulb under client's tongue toward side of mouth.
    e. Instruct the client to hold the thermometer in place by closing his/her lips around the thermometer, while holding bulb under tongue. Leave in place for at least five minutes.
    f. Grasp the stem end of the thermometer and remove it from the client's mouth. Wipe thermometer from the stem toward the bulb end with a tissue.
    g. Read the thermometer.
    h. Record the temperature reading on the paper.
    i. Shake down the thermometer.

    Using an electronic thermometer
    a. Make sure oral probe is plugged into the thermometer.
    b. Remove the probe from the unit and insert it into a probe cover.

   c. Ask client to open the mouth and raise the tongue; place covered probe at the base of the tongue on either side.

   d. Ask the client to lower the tongue and close the mouth.

   e. The health care assistant should hold the probe in the client's mouth until the tone is heard or when there is a flashing or steady light.

   f. Read the temperature reading on the digital display.

   g. Remove the covered probe from the client's mouth and discard the probe cover by pressing the eject button.

   h. Record the temperature reading on paper.

   i. Return the probe to the holder.

8. Remove, clean, and store equipment.

9. Remove gloves and dispose in appropriate container. Wash hands.

10. Make the client comfortable; place call signal within reach.

11. Record observations and report anything unusual to the charge nurse.

STEPS OF PROCEDURE FOR TAKING RECTAL TEMPERATURE:

1. Wash your hands. Put on gloves.

2. Assemble necessary equipment.

3. Identify and greet client. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. Instruct/assist client to lie on his/her side with upper leg flexed.

7. Rinse thermometer with cool water if it has been soaked in disinfectant solution.

8. Check thermometer for breaks or chips.

9. Shake down thermometer to 94°F or below; firmly grasp at the stem end and snap your wrist several times.

10. Put a small amount of lubricant on a tissue and lubricate the bulb end of the thermometer.

11. Raise the upper buttock to expose the anus; insert bulb end of the thermometer one to one and one half inches into the rectum. Cover client.

12. Hold the thermometer in place for three to four minutes while holding top hip of client to prevent rolling back.

13. Remove the thermometer. Wipe it clean with tissues from the stem toward the bulb.

14. Place the thermometer on clean toilet tissue, wipe the anal area to remove excess lubricant.

15. Cover the client.

16. Read the thermometer and record temperature reading on paper.

17. Shake down the thermometer.

18. Remove, clean, and store equipment.

19. Remove gloves and dispose in appropriate container. Wash hands.

20. Make the client comfortable; place call signal within reach.

21. Record observations and report anything unusual to the charge nurse.

STEPS OF PROCEDURE FOR TAKING AXILLARY TEMPERATURE:

1. Wash your hands.

2. Assemble necessary equipment.

3. Identify and greet client. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. Rinse thermometer with cool water if it has been soaked in disinfectant solution.

7. Check thermometer for breaks or chips.

8. Shake down thermometer to 94°F or below; firmly grasp at the stem end and snap your wrist several times.

9. Instruct/assist client to assume sitting or supine position.

10. Help the client remove an arm from the sleeve of the gown without exposing the client.

11. Dry axilla of excessive perspiration with a towel.

12. Place bulb end of thermometer in the center of axilla.

13. Bring the arm across the chest and hold in place to snugly hold the thermometer in place for 10 to 12 minutes.

14. Remove thermometer. Read and record temperature reading.

15. Shake down the thermometer.

16. Remove, clean, and store equipment.

17. Wash your hands.

18. Make the client comfortable; place call signal within reach.

19. Record observations and report anything unusual to the charge nurse.

STEPS OF PROCEDURE FOR COUNTING RADIAL PULSE:

1. Wash your hands.

2. Assemble necessary equipment.

3. Identify and greet client. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. Client should be in sitting/supine position.

7. Place fingertips over radial artery and locate pulse.

8. Note if the pulse is strong or weak and regular or irregular.

9. Count the pulse for one full minute. Recount if unsure of reading.

10. Note any abnormal characteristics of the pulse.

11. Record pulse reading on paper.

12. Wash your hands.

13. Make the client comfortable; place call signal within reach.

14. Record observations and report anything unusual to the charge nurse.

STEPS OF PROCEDURE FOR COUNTING RESPIRATIONS:

1. Wash your hands.

2. Assemble necessary equipment.

3. Identify and greet client. Identify self.

4. Explain what you are going to do.

5. Provide privacy.

6. Client should be in sitting/supine position.

7. Rest client's arm across his/her chest with your fingers on radial pulse for ease in observing rise and fall of chest cavity during respirations.

8. Begin counting respirations when you see the chest rise; count respirations for one full minute. Recount if unsure.

9. Note any abnormal characteristics of respirations.

10. Record number of respirations on paper.

11. Wash your hands.

12. Make the client comfortable; place call signal within reach.

13. Record observations and report anything unusual to the charge nurse.

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms presented in this lesson?
2. What is normal oral temperature for an elderly person? For a young adult?
3. What are three types of thermometers?
4. Are the probe covers used with an electronic thermometer reusable?
5. What is the substance contained in a glass thermometer?
6. What does the small arrow indicate on a glass thermometer?
7. How long do you have an oral thermometer in the client's mouth?
8. How long should you wait if a client has been chewing gum before checking his/her temperature?
9. What three conditions of the elderly would indicate you should not take a temperature by the oral route?
10. How many minutes are required for an accurate rectal reading?
11. What is the normal rectal temperature for an elderly client?
12. What should you remember to do before inserting a thermometer into the rectum?
13. When recording a rectal temperature, what should you do?
14. What are the five sites where a pulse is taken?
15. When checking an apical pulse, what piece of equipment do you need?
16. What is the normal respiration rate?
17. How would you describe normal respirations?
18. To what degree should the glass thermometer be shaken down?
19. What position should the client be in when taking an oral temperature?
20. Where are the fingers placed when taking the pulse?

21. What should you note about the pulse when counting it?

22. In what direction is a glass thermometer wiped?

23. How do you know when the temperature is to be read when using an electronic thermometer?

24. When would you count the pulse and respirations when checking temperature using an electronic thermometer?

25. What position should the client be in when taking a rectal temperature?

26. How far should the thermometer be inserted into the rectum?

27. When should you count the pulse and respirations when taking a rectal temperature?

28. What position should the client be in when taking an axillary temperature?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Show students different types of thermometers. If the aural thermometer is not available, show students a picture of it such as the one on page 231 of *Nursing Assistant, A Nursing Process Approach* by Barbara Hegner and Ester Caldwell, 6th ed., 1992, Delmar Publishers.

2. Have students locate pulse at different sites.

3. Have students complete HO 4: Reading a Thermometer. (Answers are on the back side of the handout.

4. Instructor demonstrates taking temperature, pulse, and respirations procedures.

5. Students practice taking each other's temperature, pulse, and respirations.

6. Students practice inserting a rectal thermometer using Chase doll.

ANSWERS TO EVALUATION ITEMS:

1. f
2. c
3. d
4. a
5. e
6. b
7. g
8. c
9. c
10. reusable
11. Mercury

625

12. d
13. a
14. b
15. d
16. c
17. a
18. a
19. d
20. lubricated
21. c
22. c
23. a
24. d
25. e
26. b
27. d
28. c
29. b
30. a
31. b
32. a
33. d
34. Answer should be one of the following: rhythm, strength, or rate.
35. d
36. b
37. d

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I to the correct definitions in Column II by writing the letter in the blank.

	Column I		Column II
___ 1.	Pulse	a.	Act of breathing in and out of the lungs
___ 2.	Vital signs	b.	Balance of amount of heat produced and amount of heat lost by the body
___ 3.	Cheyne-stokes	c.	TPR and BP
___ 4.	Respirations	d.	A pattern of breathing in which respirations are uneven and may stop for brief periods
___ 5.	Axilla	e.	Armpit
___ 6.	Body temperature	f.	The beat of the heart felt at an artery as a wave of blood passes through it
___ 7.	Pulse rate	g.	The number of heartbeats felt in one minute

8. The normal average oral temperature for an elderly person is: (Circle the letter of the best answer.)

   a. 98.6°F.
   b. 97°F.
   c. 96.8°F.
   d. 99.2°F.

9. Which of the following is not a type of thermometer used? (Circle the letter of the best answer.)

   a. Electronic
   b. Glass with long, narrow tip
   c. Stethoscope
   d. Glass with rounded, stubby tip

10. When using an electronic thermometer, the probe cover is not ____________________.

11. The substance contained in a glass thermometer is ____________________.

12. The small arrow on a glass Fahrenheit thermometer indicates: (Circle the letter of the best answer.)

    a. 99.6°F.
    b. 96.8°F.
    c. 97.6°F.
    d. 98.6°F.

13. Each short mark on a Fahrenheit thermometer is: (Circle the letter of the best answer.)

    a. 2/10 of a degree.
    b. 1/10 of a degree.
    c. 2 degrees.
    d. 1 degree.

14. The time required for an accurate reading of the oral temperature is: (Circle the letter of the best answer.)

    a. 3 to 4 minutes.
    b. 5 to 8 minutes.
    c. 10 to 12 minutes.
    d. Less than one minute.

15. If your assigned client has been smoking, chewing gum, or drinking, you should wait how many minutes before taking his/her oral temperature? (Circle the letter of the best answer.)

    a. 10 to 12 minutes
    b. 5 to 8 minutes
    c. 15 minutes
    d. 30 minutes

16. Which of the following conditions of the elderly would indicate to you that you should not take a temperature by the oral route? (Circle the letter of the best answer.)

    a. Snores when sleeping
    b. Is very talkative
    c. Is unconscious
    d. Chews gum

17. How long should the rectal thermometer remain in the anus to get an accurate reading? (Circle the letter of the best answer.)

    a. 3 to 4 minutes
    b. 5 to 8 minutes
    c. 10 to 12 minutes
    d. Less than one minute

18. The average normal rectal temperature for an elderly adult is: (Circle the letter of the best answer.)

a. 97.8°F.
b. 98.6°F.
c. 98.8°F.
d. 99.2°F.

19. Which one of the following is the correct method for charting a rectal temperature? (Circle the letter of the best answer.)

a. 96.6 O
b. 96.6 A
c. 96.6
d. 96.6 R

20. Before inserting a rectal thermometer, the thermometer should be ____________________.

21. The average pulse range of an elderly adult is between: (Circle the letter of the best answer.)

a. 100 and 120 beats per minute
b. 30 and 40 beats per minute
c. 50 and 100 beats per minute
d. 90 and 110 beats per minute

Match the pulse site in Column I with the correct location in Column II.

Column I	Column II
___ 22. Radial	a. On the left side of the chest, slightly below the nipple
___ 23. Apical	b. At the groin area
___ 24. Carotid	c. On the side of the wrist, near the thumb
___ 25. Brachial	d. On the side of the neck
___ 26. Femoral	e. At the bend of the elbow

27. When taking an apical pulse you should use a (an): (Circle the letter of the best answer.)

a. Otoscope.
b. Proctoscope.
c. Cystoscope.
d. Stethoscope.

28. The normal respiratory rate for an adult is: (Circle the letter of the best answer.)

a. 12 and below.
b. 30 to 40.
c. 14 to 20.
d. 10 to 12.

29. Which one of the following describes normal respirations? (Circle the letter of the best answer.)

a. Rapid and noisy
b. Effortless and regular
c. Shallow
d. Rise and fall of chest alternates

30. When using a glass bulb thermometer, you should shake it down to: (Circle the letter of the best answer.)

a. 94°F or below.
b. 98.6°F.
c. 96.2°F.
d. 97°F.

31. Which one of the following statements is true about the procedure for taking a blood pressure? (Circle the letter of the best answer.)

a. It is okay to take a blood pressure in the arm which has an IV.
b. If a client has had breast surgery the blood pressure should be taken on the opposite arm.
c. The blood pressure cuff can be applied over clothing.
d. The blood pressure cuff should be applied eight minutes before taking the reading.

32. Which of the following is not a way to take a temperature? (Circle the letter of the best answer.)

a. Under the knee
b. Axilla
c. Rectal
d. Oral

33. Which of the following are signs of normal respirations? (Circle the letter of the best answer.)

a. Effortless
b. Regular
c. Quiet
d. All of the above

34. When taking a pulse, you should note the ____________________ of the pulse.

35. A forceful pulse is described as being: (Circle the letter of the best answer.)

a. Strong.
b. Full.
c. Bounding.
d. All of the above.

36. A glass thermometer is wiped: (Circle the letter of the best answer.)

a. From the bottom upward.
b. From the stem toward the bulb end.
c. From the bulb end toward the stem end.
d. However you want.

37. A rectal thermometer is inserted how many inches into the rectum? (Circle the letter of the best answer.)

a. 2½-3 inches
b. 2-2½ inches
c. 1½-2 inches
d. 1-1½ inches

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ______________

TAKE ORAL TEMPERATURE

EQUIPMENT:

1. Glass oral thermometer and holder
2. Electronic thermometer
3. Tissues
4. Plastic thermometer cover (if available)
5. Disposable probe cover
6. Paper and pen
7. Gloves

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash your hands. Put on gloves.		
2. Assemble necessary equipment.		
3. Identify and greet client. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Client should be in sitting/lying down position.		
7. Using a glass bulb thermometer a. Rinse thermometer with cool water if it has been soaked in disinfectant solution.		
b. Check thermometer for breaks or chips.		
c. Shake down thermometer to 94°F or below; firmly grasp at the stem end and snap your wrist several times.		
d. Ask client to open mouth and raise tongue. Place the thermometer bulb under the client's tongue toward side of mouth.		
e. Instruct the client to hold the thermometer in place by closing his/her lips around the thermometer, while holding bulb under tongue. Leave in place for at least five minutes.		
f. Grasp the stem end of the thermometer and remove it from the client's mouth and wipe it from the stem toward the bulb end with a tissue.		

g. Read the thermometer.		
h. Record the temperature reading on the paper.		
i. Shake down the thermometer.		
Using an electronic thermometer a. Make sure oral probe is plugged into the thermometer.		
b. Remove the probe from the unit and insert it into a probe cover.		
c. Ask client to open the mouth and raise the tongue; place covered probe at the base of the tongue on either side.		
d. Ask the client to lower the tongue and close the mouth.		
e. The health care assistant should hold the probe in the client's mouth until the tone is heard or when there is a flashing or steady light.		
f. Read the temperature reading on the digital display.		
g. Remove the covered probe from the client's mouth and discard the probe cover by pressing the eject button.		
h. Record the temperature reading on paper.		
i. Return the probe to the holder.		
8. Remove, clean, and store equipment.		
9. Remove gloves and dispose in appropriate container. Wash hands.		
10. Make the client comfortable; place call signal within reach.		
11. Record observations and report anything unusual to the charge nurse.		

The student has satisfactorily completed the procedure "TAKE ORAL TEMPERATURE" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ____________

TAKE RECTAL TEMPERATURE

EQUIPMENT:

1. Glass rectal thermometer and holder
2. Tissues
3. Plastic thermometer cover (if available)
4. Paper and pen
5. Water-soluble lubricant
6. Gloves
7. Chase doll

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash your hands. Put on gloves.		
2. Assemble necessary equipment.		
3. Identify and greet client. Identify self.		
4. Explain procedure to client.		
5. Provide privacy.		
6. Instruct/assist client to lie on his/her side with upper leg flexed.		
7. Rinse thermometer with cool water if it has been soaked in disinfectant solution.		
8. Check thermometer for breaks or chips.		
9. Shake down thermometer to 94°F or below; firmly grasp at the stem end and snap your wrist several times.		
10. Put a small amount of lubricant on a tissue and lubricate the bulb end of the thermometer.		
11. Raise the upper buttock to expose the anus; insert bulb end of thermometer one to one and one half inches into the rectum. Cover client.		
12. Hold the thermometer in place for three to four minutes while holding top hip of client to prevent rolling back.		
13. Remove the thermometer. Wipe it clean with tissue from the stem toward the bulb.		

14. Place the thermometer on clean toilet tissue, wipe the anal area to remove excess lubricant.		
15. Cover the client.		
16. Read the thermometer and record temperature reading on paper.		
17. Shake down the thermometer.		
18. Remove, clean, and store equipment.		
19. Remove gloves and dispose in appropriate container. Wash hands.		
20. Make the client comfortable; place call signal within reach.		
21. Record observations and report anything unusual to the charge nurse.		

The student has satisfactorily completed the procedure "TAKE RECTAL TEMPERATURE" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature
(Verifying Satisfactory Completion)

Date

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ______________

TAKE AXILLARY TEMPERATURE

EQUIPMENT:

1. Glass oral thermometer and holder
2. Plastic thermometer cover (if available)
3. Paper and pen
4. Towel

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash your hands.		
2. Assemble necessary equipment.		
3. Identify and greet client. Identify self.		
4. Explain procedure to client.		
5. Provide privacy.		
6. Rinse thermometer with cool water if it has been soaked in disinfectant solution.		
7. Check thermometer for breaks or chips.		
8. Shake down thermometer to 94°F or below; firmly grasp at the stem end and snap your wrist several times.		
9. Instruct/assist client to assume sitting or supine position.		
10. Help the client remove an arm from the sleeve of the gown without exposing client.		
11. Dry axilla of excessive perspiration with a towel.		
12. Place bulb end of thermometer in the center of axilla.		
13. Bring the arm across the chest and hold in place to snugly hold the thermometer in place for 10 to 12 minutes.		
14. Remove thermometer. Read and record temperature reading.		
15. Shake down the thermometer.		
16. Remove, clean, and store equipment.		
17. Wash your hands.		

18.	Make the client comfortable; place call signal within reach.		
19.	Record observations and report anything unusual to the charge nurse.		

The student has satisfactorily completed the procedure "TAKE AXILLARY TEMPERATURE" according to the steps outlined.

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion)

Date

637

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ______________

COUNT RADIAL PULSE

EQUIPMENT:

1. Watch with second hand
2. Pencil and paper

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash your hands.		
2. Assemble necessary equipment.		
3. Identify and greet client. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Client should be in sitting/supine position.		
7. Place fingertips over radial artery and locate pulse.		
8. Note if the pulse is strong or weak and regular or irregular.		
9. Count the pulse for one full minute. Recount if unsure of reading.		
10. Note any abnormal characteristics of the pulse.		
11. Record pulse reading on paper.		
12. Wash your hands.		
13. Make the client comfortable; place call signal within reach.		
14. Record observations and report anything unusual to the charge nurse.		

The student has satisfactorily completed the procedure "COUNT RADIAL PULSE" according to the steps outlined.

______________________________ ______________

Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

LESSON PLAN: 12

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS: NAME OF STUDENT: ______________

COUNT RESPIRATIONS

EQUIPMENT:

1. Watch with second hand
2. Pencil and paper

CHECK IF THE STUDENT DID THE FOLLOWING	YES	NO
1. Wash your hands.		
2. Assemble necessary equipment.		
3. Identify and greet client. Identify self.		
4. Explain what you are going to do.		
5. Provide privacy.		
6. Client should be in sitting/supine position.		
7. Rest client's arm across his/her chest with your fingers on radial pulse for ease in observing rise and fall of chest cavity during respirations.		
8. Begin counting respirations when you see the chest rise; count respirations for one full minute. Recount if unsure.		
9. Note any abnormal characteristics of respirations.		
10. Record number of respirations on paper.		
11. Wash your hands.		
12. Make the client comfortable; place call signal within reach.		
13. Record observations and report anything unusual to the charge nurse.		

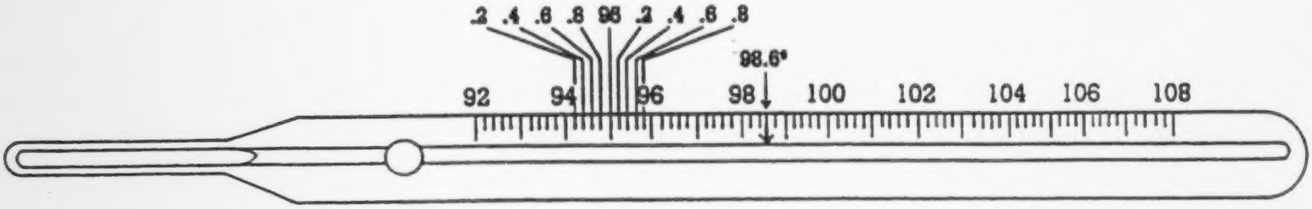
The student has satisfactorily completed the procedure "COUNT RESPIRATIONS" according to the steps outlined.

______________________________ ______________

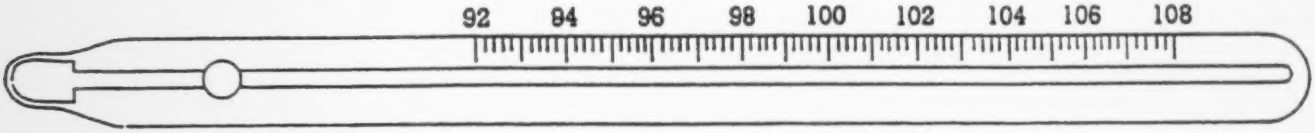
Instructor's/Approved Clinical Supervisor's Signature (Verifying Satisfactory Completion) Date

HO 1

COMMON THERMOMETERS (Fahrenheit)


.2 .4 .6 .8 95 .2 .4 .6 .8
98.6°
92
94
96
98
100
102
104
106
108

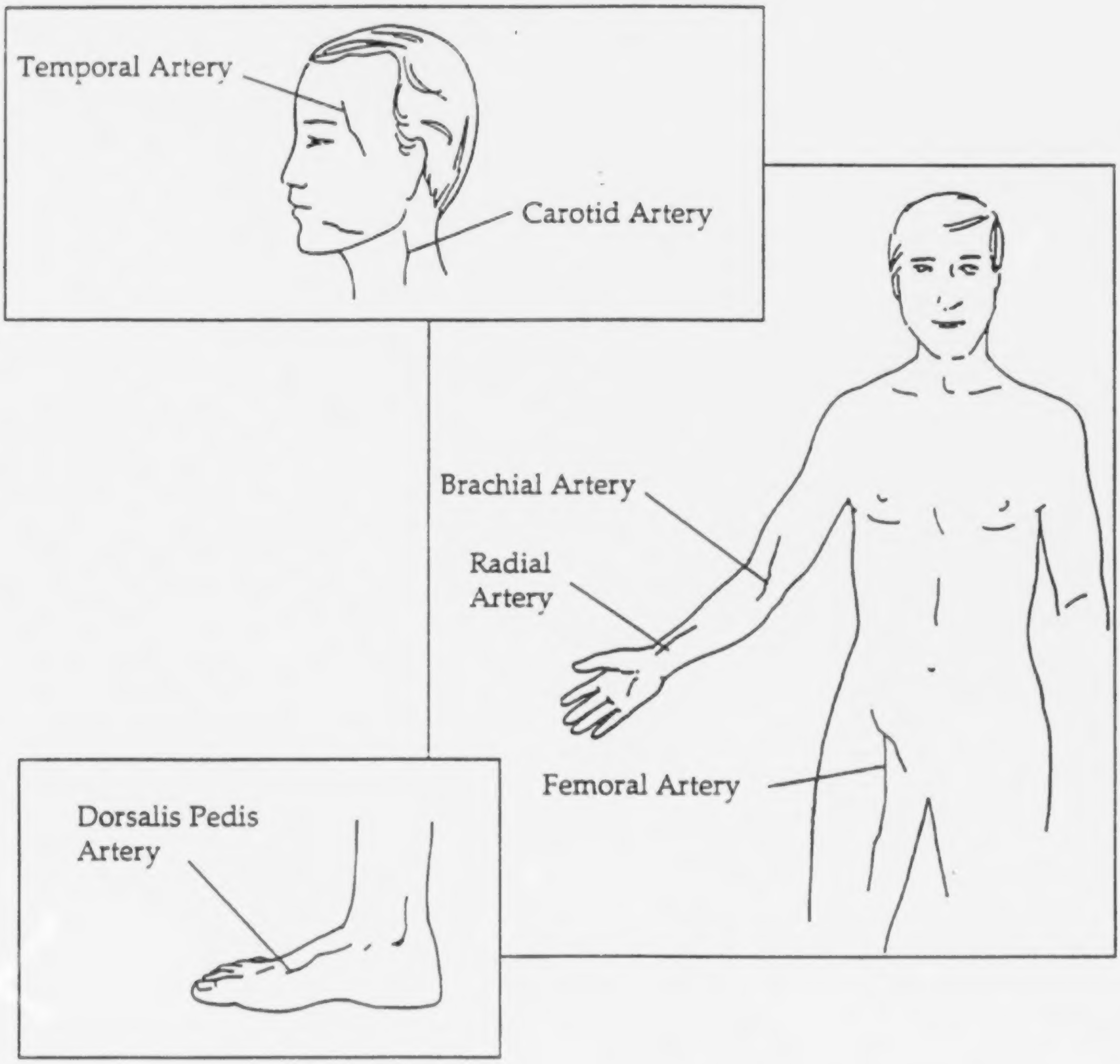
Oral Thermometer


92
94
96
98
100
102
104
106
108

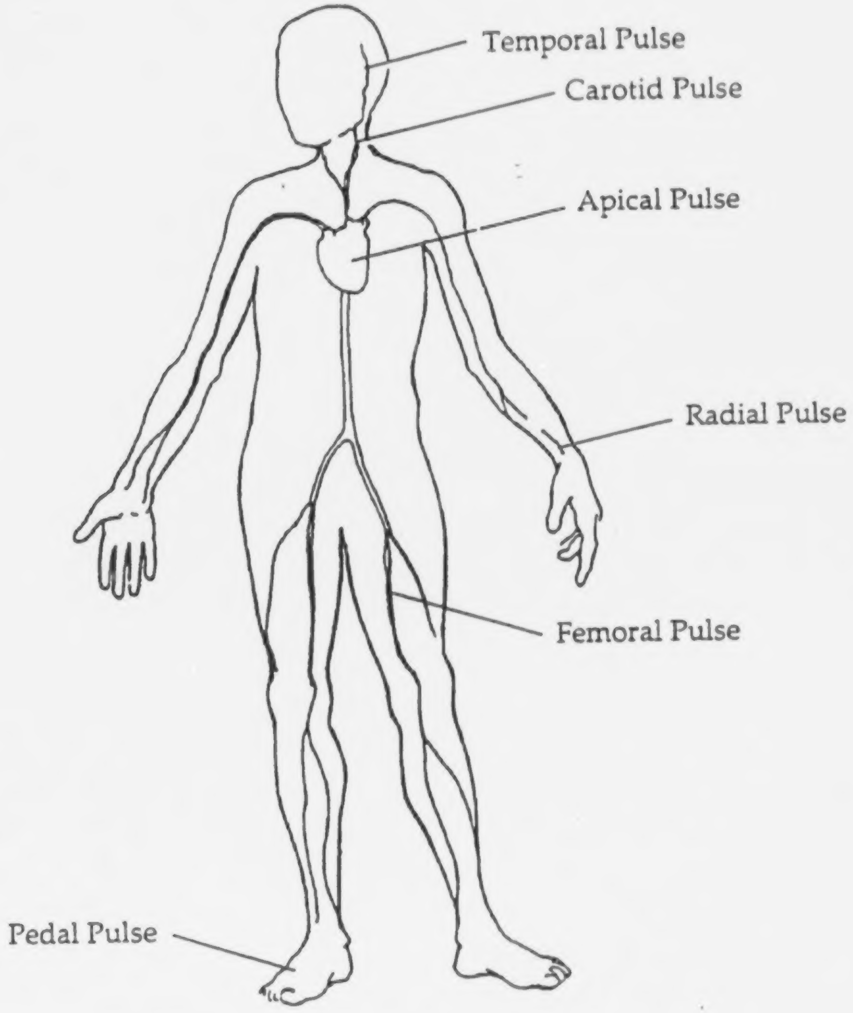
Rectal Thermometer

HO 2

SITES FOR TAKING A PULSE


Temporal Artery
Carotid Artery
Brachial Artery
Radial Artery
Femoral Artery
Dorsalis Pedis Artery

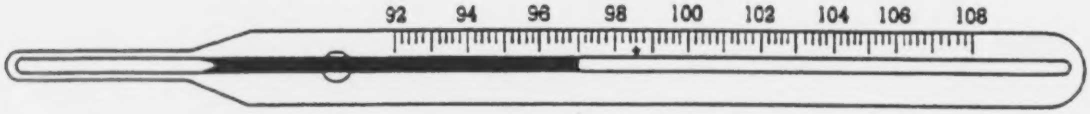
THE CIRCULATORY SYSTEM - PRIMARY PULSE POINTS


Temporal Pulse
Carotid Pulse
Apical Pulse
Radial Pulse
Femoral Pulse
Pedal Pulse

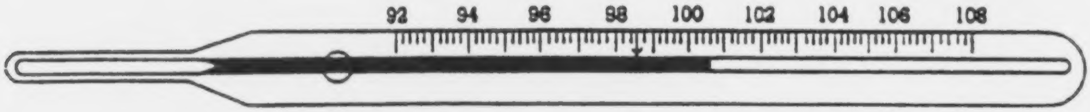
READING A THERMOMETER

1. Write the readings on these thermometers in the blanks to the right.

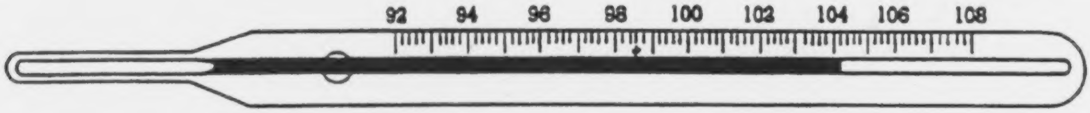
a. ______________


92
94
96
98
100
102
104
106
108

b. ______________

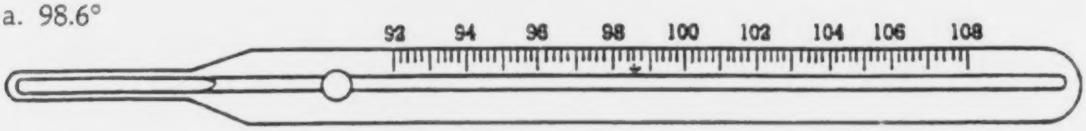

92
94
96
98
100
102
104
106
108

c. ______________

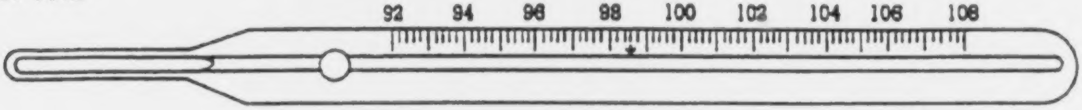

92
94
96
98
100
102
104
106
108

2. Mark the temperature readings on these thermometers.

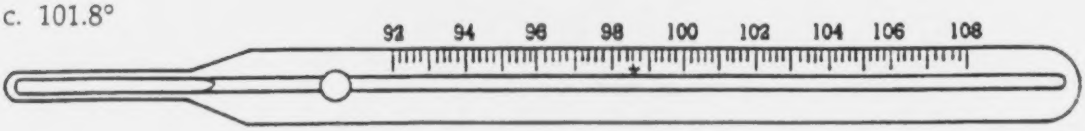
a. 98.6°


92
94
96
98
100
102
104
106
108

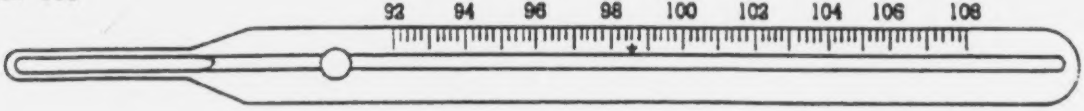
b. 99.2°


92
94
96
98
100
102
104
106
108

c. 101.8°


92
94
96
98
100
102
104
106
108

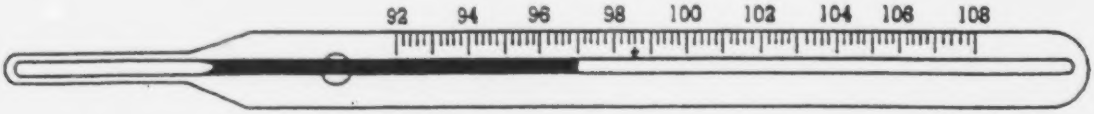
d. 103°


92
94
96
98
100
102
104
106
108

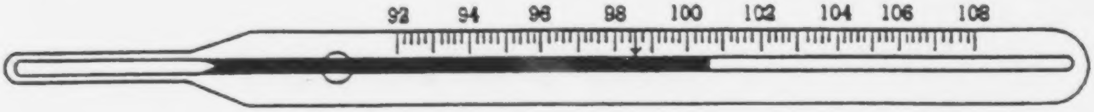
ANSWERS

1. Write the readings on these thermometers in the blanks to the right.

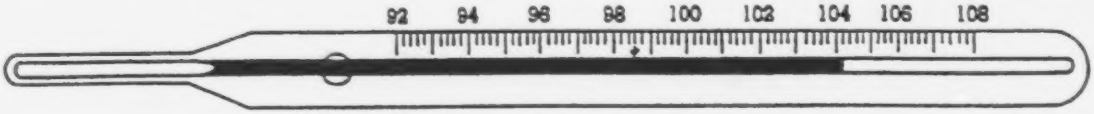
a. 97°


92
94
96
98
100
102
104
106
108

b. 100.6°

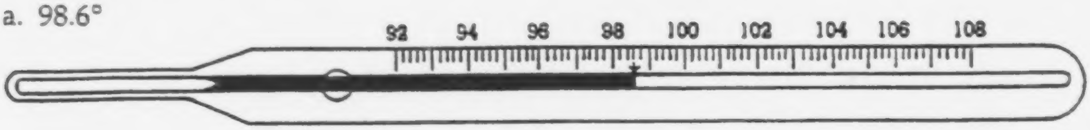

92
94
96
98
100
102
104
106
108

c. 104.2°

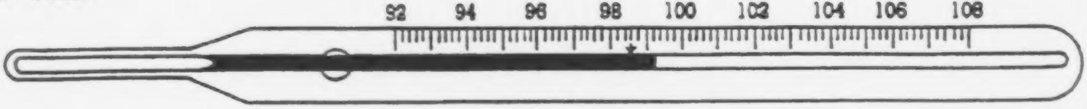

92
94
96
98
100
102
104
106
108

2. Mark the temperature readings on these thermometers.

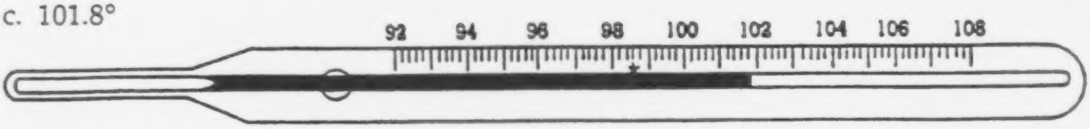
a. 98.6°


92
94
96
98
100
102
104
106
108

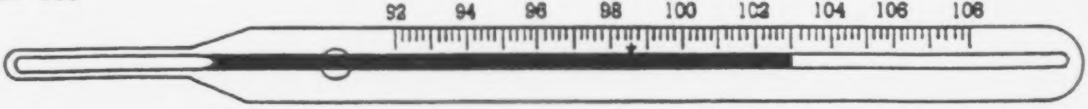
b. 99.2°


92
94
96
98
100
102
104
106
108

c. 101.8°


92
94
96
98
100
102
104
106
108

d. 103°


92
94
96
98
100
102
104
106
108

LESSON PLAN: 13

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-13 OR DEMONSTRATION:

RESPIRATORY SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match the terms in this lesson with their correct definitions.
2. Identify the three stages of respiration.
3. Match the structures of the respiratory system with their functions.
4. Define inspiration, expiration, and ventilation.
5. Match the respiratory disorders listed in this lesson with their correct descriptions.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Respiratory System
2. HO 2: Breathing
3. American Lung Association films
4. Wall chart of respiratory system
5. American Lung Association - pamphlets on respiratory diseases

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 13 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

It is the function of the organs of respiration to provide a system for exchange of gases to and from the bloodstream. This exchange is accomplished by the inhaling and exhaling of air. We will look at the organs of respiration and how they function. A person can live only a few minutes without oxygen.

When caring for the elderly, you should remember that their lungs are less efficient at exchanging gases and this will effect their respiratory rate.

Turn the diagram of the respiratory system upside down. Does it look like a tree? As you study this lesson try to associate the parts of the respiratory system to a tree.

LESSON PLAN: 13

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms (II-1)

A. Abdominal respiration - uses mostly the abdominal muscles to breath

B. Apnea - breathing stops temporarily

C. Bronchiectasis - dilatation of the bronchi

D. Bronchitis - inflammation of the bronchi

E. Bronchoscopy - inspection or examination of the bronchi

F. Cheyne-strokes - deep, rapid respirations for 30 seconds, no breathing for 10-30 seconds; cycle repeats

G. Dyspnea - painful, difficult, labored breathing

H. Eupnea - normal breathing

I. Fissures - clefts

J. Hemoptysis - spitting or coughing up blood

K. Hyperpnea - abnormal increase in depth and rate of respirations

L. Hypoxia - oxygen deficiency

M. Irregular respirations - the depth of breathing changes and the rate of the rise and fall of the chest is not steady

N. Laryngitis - inflammation of the larynx

O. Orthopnea - able to breath only in upright position

P. Oxidation - the combination of a substance with oxygen

Q. Pharyngitis - inflammation of the pharynx

R. Pleuritis - inflammation of the pleura

S. Pneumonitis - inflammation of the lung

- T. Pneumothorax - lung collapses due to a build up of air in the pleura cavity
- U. Rhinitis - inflammation of the mucous membrane of the nose
- V. Stertorous respiration - abnormal snoring noises when breathing
- W. Tachypnea - very fast respirations
- X. Thoracentesis - procedure to drain excessive fluid from the pleural cavity
- Y. Tracheotomy - incision into the trachea

II. Respiratory system

- A. Function of the respiratory system
    1. Supplies oxygen to the body cells
    2. Removes carbon dioxide from the body cells
    3. Filters, warms, and humidifies the air we breath
- B. Three stages of respiration **(II-2)**
    1. External - breathing or ventilation
        - a. Inhale oxygen into the body
        - b. Exhale carbon dioxide in the blood through the alveoli of the lungs
    2. Internal respiration
        - a. The exchange of carbon dioxide and oxygen between the cells and the lymph
        - b. Also the oxidative process of energy in the cells
    3. Cellular respiration or oxidation
        - a. A chemical reaction that occurs within the cells
        - b. When the food that you have eaten is oxidized, it gives off the waste products of carbon dioxide and water. They then are transported from the cells to the circulatory system and exhaled by the lungs.

III. Organs and Functions of Respiratory System (HO 1) **(II-3)**

- A. Nose - nasal cavity

1. Structure
    a. Nostrils or anterior nares - air enters the respiratory system through the nostrils.
    b. Septum - it is the partition which divides the nasal cavity into a right and left chamber.
    c. Sinuses
        (1) Sinuses are cavities of the skull in and around the nasal region.
        (2) There are four sinuses:
            (a) Frontal
            (b) Maxillary
            (c) Sphenoid
            (d) Ethmoid
        (3) Sinuses connect to the nasal cavity by way of short ducts.
2. Function
    a. Warms, moistens, and filters air
    b. Phonation
    c. Organ of smell
    d. Passageway for air

B. Pharynx - throat
1. Structure
    a. Approximately 5 inches long
    b. Three sections
        (1) Nasopharynx
            (a) Adenoids and tonsils are located in the nasopharynx and also the oropharynx.
            (b) Eustachian tubes open into the nasopharynx.
        (2) Oropharynx - located behind the mouth

        - (3) Laryngopharynx - lowest portion

    2. Function - passageway for air and food.

C. Larynx - voice box

    1. Structure

        a. Located below the pharynx; triangular shape

        b. Composed of several pieces of cartilage: thyroid cartilage and Adam's apple

        c. Vocal cords - two short fibrous bands that stretch across the interior of the larynx

        d. Epiglottis - partially covers the opening into the larynx. It closes off the larynx during swallowing so that food does not enter the trachea.

    2. Function - speech and phonation

D. Trachea - windpipe

    1. Structure

        a. About 4 ½ inches long; tube-like passageway

        b. Extends from the larynx, and continues to form the two bronchi

        c. Composed of C-shaped hyaline cartilage

        d. Walls lined with mucous membrane and ciliated epithelium

    2. Function

        a. Passage-way for air

        b. Traps inhaled food particles

E. Bronchi, bronchiolus, and alveoli

    1. Structure

        a. They are smooth muscle lined with ciliated mucous membrane.

        b. Lower end of the trachea divides to form the right and left bronchi; right bronchus is shorter and wider than the left bronchus.

        c. At the point where the bronchi enter the lungs, they subdivide into the bronchial tubes.

    - d. Alveolar duct is located at the end of each bronchiole.
    - e. Alveolar ducts end in a grape-like cluster called the alveoli.
  - 2. Function
    - a. Passageway for air
    - b. Exchange of oxygen and carbon dioxide occurs in the alveoli.

F. Lungs

- 1. Structure
  - a. Located in the two lateral chambers of the thoracic cavity
  - b. Separated by the mediastinum and heart
  - c. Base is the lower part of the lung.
  - d. Right lung larger than left lung
  - e. Lobes
    - (1) Right lung - divided into 3 lobes: superior, middle, inferior
    - (2) Left lung - divided into 2 lobes: superior and inferior
  - f. Lungs are covered with a moist thin membrane called the pleura.
- 2. Linings - pleura
  - a. Visceral pleura or pulmonary pleura - covers lungs and between lobes
  - b. Parietal pleura - lines thoracic cavity and upper surface of diaphragm
- 3. Pleural cavity
  - a. Space between visceral pleura and parietal pleura
  - b. Contains pleural fluid
  - c. Pleural fluid prevents friction when you breath.
- 4. Function
  - a. Transportation - air moves into and out of the lungs
  - b. Remove gases

IV. Respiratory Process

- A. Control of breathing (HO 2)
  - 1. Medulla monitors amount of carbon dioxide in blood and controls respirations.
  - 2. Muscles of breathing are signaled to contract and expand by medulla.
    - a. Intercostals
    - b. Diaphragm
  - 3. Amount of carbon dioxide
- B. Inspiration - drawing of air into the lungs **(II-4)**
- C. Expiration - forcing air from the lungs
- D. Ventilation - combination of inspiration and expiration
- E. Respiratory rates
  - 1. Normal
    - a. Child - above 20
    - b. Adult - 14-20 per minute
  - 2. Factors affecting rate
    - a. Sex
    - b. Posture
    - c. Temperature
    - d. Exercise
    - e. Age
    - f. Drugs

V. Disorders of the Respiratory System **(II-5)**

- A. Emphysema - air becomes trapped in the lungs because the wall of the alveoli becomes enlarged. People with emphysema develop oxygen deficiency.
- B. Lung cancer - contributing factors are smoking and exposure to other environmental cancer-producing agents

C. Cancer of larynx - may require removal of the larynx and cause loss of the voice

D. Infections - pneumonia and influenza

E. Tuberculosis - (Refer to lesson on tuberculosis.)

F. COPD - Chronic Obstructive Pulmonary Disease - the condition develops due to prolonged blockage of the air passageways. It causes loss of alveoli and poor delivery of blood to the lungs. Conditions such as asthma, emphysema, and bronchitis cause COPD to develop

G. Bronchitis - inflammation in the bronchi due to infection or irritation

H. Influenza - characterized by inflammation of the mucous membrane of the respiratory system

I. Pneumonia - usually caused by a bacteria but can be caused by a virus; lungs fill up with inflammatory exudate.

J. Diphtheria - a very serious infectious disease that can lead to cardiac damage and even death. It is caused by the Corynebacterium diphtheria. There is a false, grayish-white, or yellow membrane that covers the pharynx, larynx, trachea, and tonsils.

K. Pertussis - (Whooping cough) coughing attacks that have a whooping sound; it is an infectious disease that can cause death in the very young

L. Asthma - characterized by labored breathing and coughing; an attack may be brought on by coming in contact with an allergen or by emotional stress

VI. Summary and Conclusion

A. Terms

B. Respiratory system

C. Organs and functions of respiratory system

D. Respiratory process

E. Disorders of the respiratory system

Your next lesson will be on oxygen therapy.

LESSON PLAN: 13

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms found in this lesson?
2. What are the three stages of respiration?
3. What is the function of each of the structures of the respiratory system?
4. How do you describe inspiration, expiration, and ventilation?
5. What is the description of each respiratory disorder listed in this lesson?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES

1. Invite a respiratory therapist to speak.
2. Follow respiratory process from inhalation of air on respiratory model.
3. Assign reports on various lung diseases, and the effects of smoking.

ANSWERS TO EVALUATION ITEMS:

1. c
2. f
3. d
4. e
5. b
6. b
7. f
8. a
9. e
10. c
11. d
12. b
13. c
14. c
15. d
16. a
17. e
18. b

LESSON PLAN: 13

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with their correct definitions in Column II.

Column I

____ 1. Eupnea

____ 2. Apnea

____ 3. Fissures

____ 4. Dyspnea

____ 5. Orthopnea

Column II

a. Oxygen deficiency

b. Able to breathe only in upright position

c. Normal breathing

d. Clefts

e. Painful, difficult, labored breathing

f. Breathing stops temporarily

6. What are the three stages of respiration? (Circle the letter of the best answer.)

a. Shallow, slow, and speed
b. External, internal, and cellular
c. Warm, moist, and filter
d. Inhale, breathe, and exhale

Match each structure of the respiratory system in Column I with the correct function in Column II.

Column I

____ 7. Nose

____ 8. Pharynx

____ 9. Larynx

____ 10. Trachea

____ 11. Alveoli

____ 12. Lungs

Column II

a. Passageway for air and food

b. Removes gases, air moves into and out of

c. Passageway for air and traps inhaled food particles

d. Exchange of oxygen and carbon dioxide

e. Speech and phonation

f. Warms, moistens, and filters air

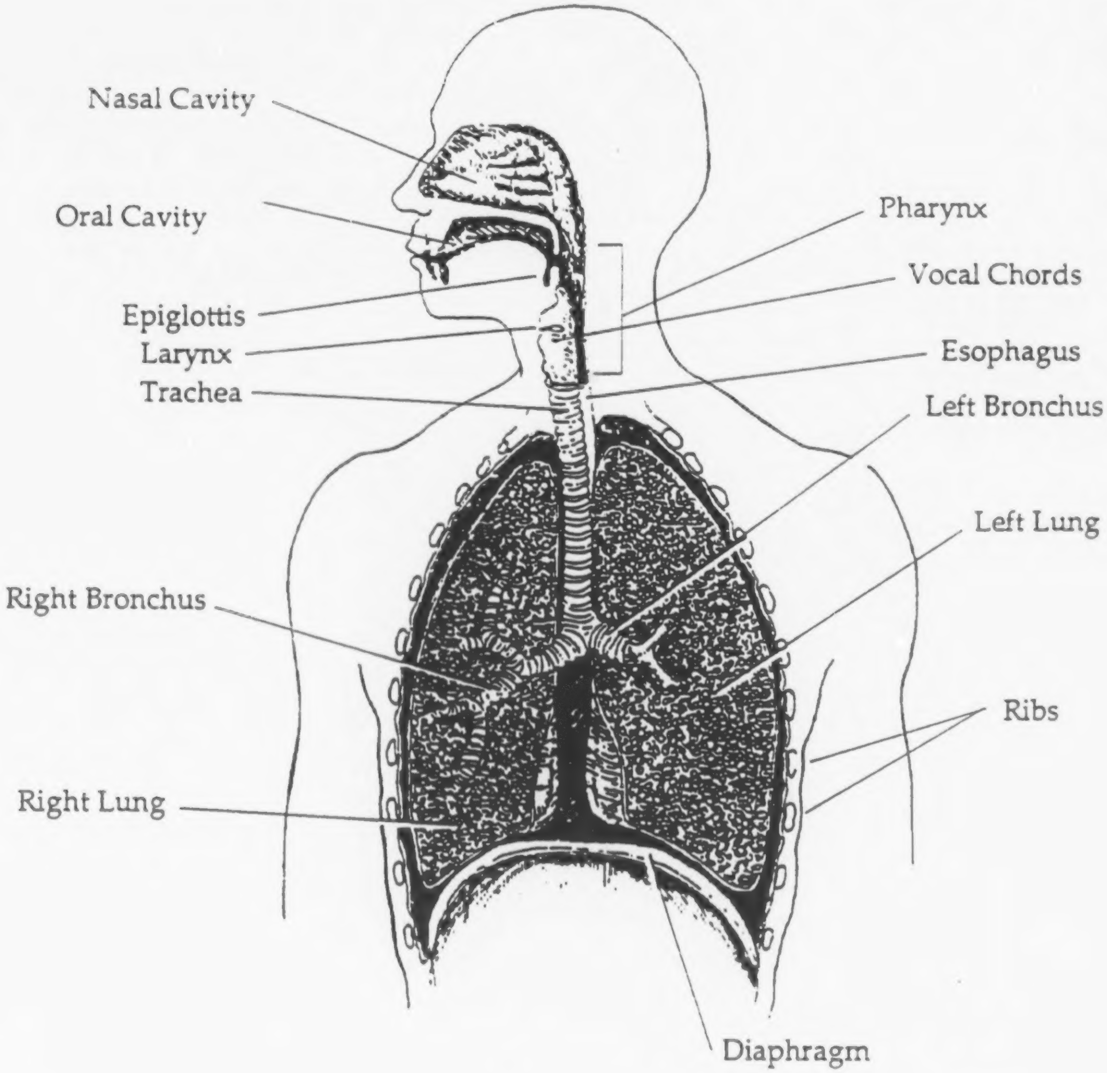
13. What is ventilation? (Circle the letter of the best answer.)

a. Drawing air into the lungs
b. Forcing air from the lungs
c. A combination of inspiration and expiration
d. Difficult, long, slow respirations

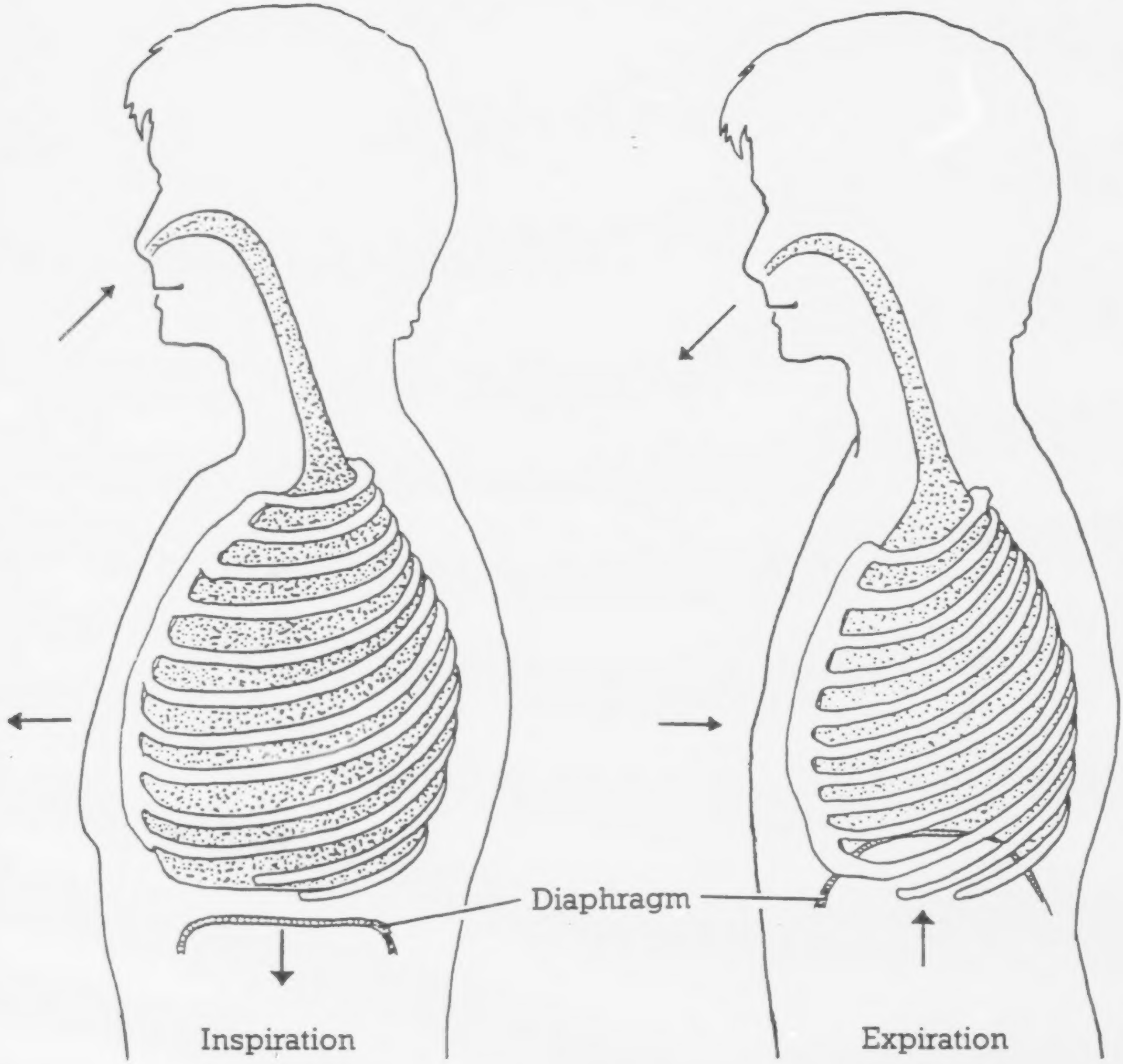
Match each respiratory disorder in Column I with the correct description of the disorder in Column II.

Column I	Column II
____ 14. Pertussis	a. Chronic obstructive pulmonary disease
____ 15. Emphysema	b. Lungs fill up with inflammatory exudate
____ 16. COPD	c. There is a whooping sound to the cough
____ 17. Diphtheria	d. Air becomes trapped in the lungs because the wall of the alveoli becomes enlarged
____ 18. Pneumonia	
	e. There is a false, grayish-white, or yellow membrane that covers the pharynx, larynx, trachea, and tonsils

RESPIRATORY SYSTEM


Nasal Cavity
Oral Cavity
Epiglottis
Larynx
Trachea
Right Bronchus
Right Lung
Pharynx
Vocal Chords
Esophagus
Left Bronchus
Left Lung
Ribs
Diaphragm

BREATHING


Diaphragm
Inspiration
Expiration

LESSON PLAN: 14

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organization structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-14 OR DEMONSTRATION:

OXYGEN THERAPY
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. List two types of oxygen containers.
2. List two methods of administering oxygen.
3. Identify five safety measures to follow when administering oxygen.
4. Identify five comfort measures to follow when administering oxygen.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. Oxygen tank
2. Plastic mask
3. Nasal cannula

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 14 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 18.

Hegner, Barbara; Ester Caldwell. *Nursing Assistant, A Nursing Process Approach*. 6th ed. Albany, NY: Delmar Publisher, 1992. Unit 23, Section 10.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 12, Section 2.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 13.

INTRODUCTION:

Oxygen is a colorless, odorless, tasteless gas that is absolutely necessary to life. Because of a disease or condition, the client may not be able to breathe in enough oxygen on his/her own.

Oxygen is considered a drug. The doctor must order it to be administered. The health care assistant will never be responsible for the oxygen; however, he/she will be assigned to take care of clients who are receiving oxygen and should be familiar with the equipment used and basic safety and comfort measures to follow.

LESSON PLAN: 14

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Oxygen Containers **(II-1)**

  A. Oxygen cylinder or tank

  B. Central oxygen system with wall outlet connector

  C. Machines that remove oxygen from room air (oxygen concentrator)

II. Methods of Administration of Oxygen (O_2) **(II-2)**

  A. Nasal cannula

    1. Two prongs leading from the tubing are placed in each nostril and held in place by an elastic strap around the head. The prongs should be angled back into the nostrils.

    2. Plastic tubing connects oxygen source container to the cannula.

    3. This is the most common device used to administer O_2.

    4. Client should not breathe through his or her mouth since the oxygen will go out the opened mouth.

  B. Mask

    1. Plastic mask placed over the nose and mouth and fitted to nose with metal adjuster

    2. Used for the client who is breathing through his/her mouth

    3. The most effective way of delivering oxygen

III. Safety Measures **(II-3)**

  A. Oxygen speeds up combustion

    1. Post "No Smoking" signs outside and inside the room when oxygen is set up.

    2. Remove electrical equipment from the room before administering oxygen.

3. Do not use oil-based products (e.g., vaseline®, body lotion) in the room where oxygen is being administered.

4. Use clothes and bed linens made of cotton to avoid static electricity from synthetic or wool fabrics (e.g., wool blankets or sweaters).

B. Check to see that portable oxygen tanks are secured with straps to prevent them from falling.

C. Check the oxygen gauge indicating the amount of oxygen left in the tank; notify the charge nurse if the supply is low.

D. Check the tubing for kinks and disconnections.

E. Check to see that the client is not lying on the tubing.

F. Check flowmeter on oxygen tank to make sure it is delivering the prescribed rate; DO NOT change the setting; report to the charge nurse immediately if it is not correct.

G. Check water level in humidifying jar; it should be high enough (2/3 full) so that it bubbles as oxygen goes through it. It should also appear clear--no particulate matter. If anything appears abnormal, report to charge nurse. Remember pure oxygen is very drying and thus is damaging to tissue. **(II-4)**

H. Oxygen should be turned off when not being administered to the client.

IV. Comfort Measures **(II-5)**

A. Check the elastic headband securing face mask or cannula in place to see that it is not too tight and causing pressure areas.

B. Check for irritation from the mask or cannula around the face and ears; pad pressure areas with cotton.

C. Keep the skin under cannula or mask clean and dry.

D. Give frequent oral hygiene and adequate fluids to the client; oxygen is drying to tissue thus causing the mouth to become dry and stale tasting.

E. Remove and wipe face mask every shift to rid mask of moisture.

F. Check nasal cannula for mucus buildup. Replace if it is plugged.

G. Check that face mask is snug and not allowing oxygen to be ineffective.

H. Observe for any signs and symptoms that client is not getting enough oxygen and report immediately to the charge nurse.

1. Client feels like he/she "can't breathe."

2. Restless, irritable, anxious, or frightened
3. Decreased muscle coordination and slowed mental abilities
4. Dyspnea or cyanosis
5. Increased rate and depth of respirations
6. Client complains of dizziness or faintness

V. Summary and Conclusion

A. Oxygen containers

B. Methods of administering oxygen

C. Safety measures

D. Comfort measures

The health care assistant's role in oxygen therapy is to make pertinent observations. Clients receiving oxygen may not be a common occurrence in every facility, but all health care assistants should have an understanding of how dangerous this can be if not handled properly and what he/she can do to keep the client comfortable while receiving oxygen. The next lesson will be on tuberculosis.

LESSON PLAN: 14

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are three types of oxygen containers?
2. What are two common methods of administering oxygen?
3. What safety measure actions should the health care assistant take if the client is receiving oxygen?
4. Why is it necessary to humidify oxygen?
5. What comfort measures are important for the client receiving oxygen?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Show students different equipment used in oxygen therapy.

ANSWERS TO EVALUATION ITEMS:

1. The student may list any two of the following:
    a. Oxygen cylinder or tank
    b. Central oxygen system with wall outlet connector
    c. Machines that remove oxygen from room air

2. a Nasal cannula
    b. Mask

3. d
4. d
5. c
6. b

LESSON PLAN: 14

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

1. List two types of oxygen containers.

   a.
   b.

2. List two methods of administering oxygen.

   a.
   b.

3. If a client is receiving oxygen, the health care assistant should do all of the following except: (Circle the letter of the best answer.)

   a. Check to see that portable oxygen tanks are secure.
   b. Check tubing for kinks and disconnections.
   c. Make sure the client is not lying on the tubing.
   d. Change the flowmeter to what you feel is the right amount of oxygen.

4. Which of the following is a sign that the client is not getting enough oxygen? (Circle the letter of the best answer.)

   a. Restless, anxious
   b. Dyspnea, cyanosis
   c. Dizziness or faintness
   d. All of the above

5. What safety measure should the health care assistant follow if the client is receiving oxygen? (Circle the letter of the best answer.)

   a. Use oil-based products on the client.
   b. Use wool bed blankets to improve static electricity.
   c. Post a "no smoking" sign outside and inside the room.
   d. Make certain the water level in the humidifying jar is less than 1/4 full.

6. To make certain the client receiving oxygen is comfortable, the health care assistant should: (Circle the letter of the best answer.)

   a. Check that the face mask is fitting loosely.
   b. Check for irritation from the mask or cannula around the face.
   c. Keep the skin under the cannula moist.
   d. Never remove the face mask once it is in place.

LESSON PLAN: 15

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-15 OR DEMONSTRATION:

TUBERCULOSIS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms found in this lesson with their correct definitions.
2. Name the causative organism of tuberculosis.
3. Name two skin tests that are given to determine if an individual has been infected with the tubercle bacillus.
4. List the symptoms of tuberculosis.
5. Identify how tuberculosis is spread.
6. Name the vaccine given that offers protection from contracting tuberculosis.
7. Name the drug used as preventive therapy for individuals exposed to tuberculosis.
8. Identify treatment given for tuberculosis.

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 15 prior to class and be prepared to discuss the information.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

DeWit, Susan C. *Keane's Essentials of Medical-Surgical Nursing*, 3rd ed. Philadelphia: W.B. Saunders Co., 1992.

Hegner, Barbara R.; Ester Caldwell. *Geriatric A Study of Maturity*, 5th ed. Albany, NY: Delmar Publishers, 1991.

Prevention and Control of Tuberculosis in Facilities Providing Long-Term Care to the Elderly: Recommendation of the Advisory Committee for Elimination of Tuberculosis. Atlanta, GA. U.S. Department of Health and Human Services, Center for Disease Control.

INTRODUCTION:

The incubation period for tuberculosis is four to 12 weeks from infection to the primary lesion. The disease remains infectious as long as the tubercle bacilli is discharged in the sputum.

The health care assistant may care for clients who have not been diagnosed as having tuberculosis but have the disease. It is also possible to work with someone who has the disease but has not yet been diagnosed. This is why skin testing of health care workers and all new clients to long-term care facilities is so important.

LESSON PLAN: 15

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Extrapulmonary - refers to tuberculosis outside the lungs.

   B. Fibrosis - fibrous tissue formation

   C. Hemoptysis - coughing up blood

   D. Lymph nodes - small nodules of specialized immune cells located throughout the body (also called lymph glands or glands)

   E. Mantoux tuberculin skin test - tuberculin test given by injecting 0.1 ml of PPD-tuberculin into the superficial layers of the skin (usually in the forearm) with a needle and syringe; the most reliable and best standardized technique for tuberculin testing

   F. *Mycobacterium tuberculosis* - the bacterium which causes TB; often abbreviated *M. tuberculosis*

   G. Necrotic - the change that occurs as a result of the death of cells

   H. Pulmonary - referring to the lungs

   I. Tubercle - walled off area

   J. Tubercle bacilli - term often used to refer to *Mycobacterium tuberculosis* (and to *Mycobacterium bovis*)

II. Description

   A. Tuberculosis is an infectious disease of the lungs characterized by lesions within the lung tissue. Approximately 85 percent of the cases in the U.S. are pulmonary TB.

   B. The lesions may continue to degenerate and become necrotic, or they may heal by fibrosis and calcification.

   C. The tubercle bacillus is the causative organism. **(II-2)**

   D. It can occur in other parts of the body. It is called extrapulmonary if TB occurs outside of the lungs, such as in the kidneys and lymph nodes. About 15 percent of the cases in the U.S. are extrapulmonary.

III. Diagnosis

A. Mantoux and Tine skin tests - The Mantoux is the most accurate. **(II-3)**

1. The test is read 48 to 72 hours after the injection.

2. If the swelling at the site of injection is more than 10 to 15 mm, the test is positive.

3. Some people who are infected with both HIV and TB germs will not react to the TB skin test. This is because the immune system is not working properly.

4. A positive tuberculin test does not tell you if the individual has active or inactive tuberculosis. It only indicates that the individual has been infected with the tubercle bacillus.

B. Chest X-ray - usually the doctor can see calcified and healed lesions and active lesions on an x-ray.

C. Sputum specimen - the diagnosis of active TB is made when the tubercle bacillus is found in the sputum.

IV. Symptoms

A. General symptoms

1. Weakness

2. Feeling sick

3. Weight loss

4. Fever - low grade in the afternoon

5. Night sweats

B. Common symptoms

1. Long-term cough

2. Chest pain

3. Coughing up blood (hemoptysis)

V. How is tuberculosis spread? **(II-5)**

   A. Airborne - coughing, sneezing, laughing, or singing

   B. Easily spread to others who have the same living space

VI. Immunity - BCG (Bacille Calmette-Gueren) vaccine offers some protection. **(II-6)**

VII. Preventive Therapy

   A. Isoniazid (INH) is approximately 85% effective if a person has been exposed to tuberculosis. **(II-7)**

   B. Isoniazid (INH) is usually given one time a day for a year.

VIII. Treatment

   A. Medical treatment

      1. Drugs are usually given in a combination of two or three (Example: Isoniazid (INH), Rifampin (RMP), and Ethambutol). The choice of drugs will depend upon many factors and will be ordered by the physician.

      2. It usually takes 2 to 3 months of drug therapy for sputum smears to be negative.

         a. The individual is allowed to return home after one negative sputum smear.

         b. The individual is usually allowed to go back to work after three negative smears.

      3. Many individuals with tuberculosis are treated at home and are not hospitalized.

   B. Surgical treatment - sometimes it is necessary to remove the affected part of the lung.

   C. Respiratory Isolation may be indicated to prevent the spread of disease-producing germs (pathogens) by droplets that are coughed, sneezed, or breathed into the air.

IX. Summary

   A. Terms and definitions

   B. Description

   C. Diagnosis

   D. Symptoms

E. How is tuberculosis spread

F. Immunity

G. Preventive therapy

H. Treatment

It is very important that all contacts of an individual with active tuberculosis be reported. The individual and all contacts need to be educated on how the disease is spread and the importance of taking all medications as prescribed by the physician. The next unit is on the nervous system.

LESSON PLAN: 15

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms defined in this lesson?
2. What organism causes tuberculosis?
3. What two skin tests are given to determine if an individual has been infected with the tubercle bacillus?
4. What are eight (8) symptoms of tuberculosis?
5. How is tuberculosis spread?
6. What vaccine is given to protect individuals from TB?
7. What medication is given to individuals exposed to tuberculosis?
8. What is the medical and surgical treatment for tuberculosis?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have the class write or call for information about tuberculosis:

   Missouri Department of Health
   P.O. Box 570
   Jefferson City, MO 65102-0570

   Phone 1-573-751-6400

2. Have a class discussion on the living conditions that could lead to the spread of tuberculosis.

ANSWERS TO EVALUATION ITEMS:

1. b
2. e
3. f
4. d
5. c
6. b
7. Mantoux and Tine

8. weakness
   feeling sick
   weight loss
   fever
   night sweats
   cough
   chest pain
   coughing up blood
9. d
10. c
11. drugs
12. lung

LESSON PLAN: 15

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

		Column I		Column II
____	1.	Fibrosis	a.	Small nodules of immune cells
____	2.	Hemoptysis	b.	Fibrous tissue formation
____	3.	Tubercle	c.	Referring to the lungs
____	4.	Necrotic	d.	Change that occurs as a result of the death of cells
____	5.	Pulmonary	e.	Coughing up blood
			f.	Walled off area

6. The causative organism for tuberculosis is the tubercle: (Circle the letter of the best answer.)

   a. Virus.
   b. Bacillus.
   c. Staph.
   d. Strep.

7. Two skin tests given to determine if an individual has been infected with the organism that causes tuberculosis are the ____________________ and ____________________.

8. List eight symptoms of tuberculosis.

   a. ____
   b. ____
   c. ____
   d. ____
   e. ____
   f. ____

g.____

h.____

9. Tuberculosis is spread by: (Circle the letter of the best answer.)

   a. Feces specimens.
   b. Blood samples.
   c. Urine specimens.
   d. Airborne particles.

10. The medication given to protect individuals exposed to tuberculosis is: (Circle the letter of the best answer.)

    a. Isoniazid.
    b. Gamma globulin.
    c. Bacille calmette-gueren.
    d. ELISA.

11. The medical treatment for tuberculosis consists of giving a combination of two or three ______________________.

12. The surgical treatment of tuberculosis consists of sometimes removing the affected part of the ______________________.

LESSON PLAN: 16

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-16 OR DEMONSTRATION:

NERVOUS SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with their correct definitions.
2. State the qualities which enable the nervous system to act as a communication network.
3. Describe a neuron.
4. Identify the three types neurons.
5. Name the three divisions of the nervous system.
6. Identify on a diagram the cerebrum, cerebellum, pons, medulla, and spinal cord.
7. Label on a diagram the parts of the brain.
8. Match the divisions of the brain with their functions.
9. Describe the number of spinal and cranial nerves.
10. Name the two divisions of the autonomic nervous system.
11. Match conditions of the nervous system with their definitions.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Neuron
2. HO 2: The Brain
3. HO 3: Reflex Arc
4. HO 4: The Nervous System
5. Anatomy charts
6. Anatomical model - brain

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 16 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

The communications system of our bodies is the nervous system. It controls and organizes all our body activities, both voluntary and involuntary. It is made up of the brain, the spinal cord, and nerves.

LESSON PLAN: 16

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

  A. Afferent nerve - carries nerve impulses from the periphery to the central nervous system; a sensory nerve

  B. Axon - structure of a nerve cell that carries impulses away from the cell body to the dendrites

  C. Cephalalgia - headache

  D. Conductivity - ability to transmit to distant points

  E. Dendrites - a process of the nerve cell that carries impulses toward the cell body

  F. Encephalitis - inflammation of the brain

  G. Fissure - deep groves of a structure

  H. Ganglia - a group of cell bodies outside the central nervous system that carry impulses to involuntary muscles and glands

  I. Gray matter - matter that contains naked nerve fibers

  J. Irritability - react when stimulated

  K. Neuralgia - painful nerves, nerve pain

  L. Neuritis - inflammation of a nerve

  M. Poliomyelitis - inflammation of the gray matter of the spinal cord

  N. Psychosomatic - pertaining to the mind body relationship

  O. Receptor - sensory nerve that receives a stimulation and transmits it to the central nervous system

II. The Nervous System as a Communication Network **(II-2)**

  A. Able to receive stimuli

  B. Responds by producing nerve impulses

C. Conducts and coordinates neural information to and from the brain and spinal cord

III. Neurons - Nerve Cell (HO 1) **(II-3)**

A. Structure

1. Cell body - contains nucleus, found only in gray matter of the brain

2. Dendrites - projection that transmits impulses to the neuron cell. There may be several dendrites.

3. Axon - transmit impulses away from the neuron cell. There is only one Axon.

4. Synapse - the functional junction between two neurons

B. Types **(II-4)**

1. Sensory (afferent) - carry impulses toward the spinal cord and brain.

2. Motor (efferent) - carry messages from the brain and spinal cord to glands and muscles.

3. Connecting (associative) - carry impulses from one neuron to another.

C. Nerve fibers

1. Myelin

2. Neurilemma - nerve sheath

IV. Divisions of the Nervous System (HOs 2, 3, & 4) **(II-5 - 7)**

A. Central nervous system

1. Brain

a. Cerebrum

(1) Largest area of the brain located in the upper part of the skull at the highest point

(2) Divided into two hemispheres by the longitudinal fissure; each cerebral hemisphere is divided into lobes that correspond to the cranial bones which they lay over

(a) Longitudinal fissure - divides the cerebrum into two hemispheres

(b) Transverse fissure - divides the cerebrum from the cerebellum

- (c) Central fissure or fissure of Rolando - divides the frontal from the parietal lobe
- (d) Lateral fissure or fissure of Sylvius - divides the frontal and temporal lobes
- (e) Parieto-occipital fissure - separates the occipital lobe from the parietal and temporal lobes

(3) Function

- (a) Frontal lobe - controls the motor functions of our body
- (b) Parietal lobe
    - i) Receives and interprets nerve impulses for pain, touch, heat, and cold
    - ii) Helps to determine distances, sizes, and shapes
- (c) Occipital lobe - controls eyesight
- (d) Temporal lobe - controls hearing and smell
- (e) Cerebral cortex - controls conscious thought, memory, reasoning, judgement, and will power

b. Diencephalon - two major structures

(1) Thalamus

- (a) Located inside each of the cerebral hemispheres
- (b) Functions as a relay station for incoming and outgoing nerve impulses

(2) Hypothalamus

- (a) Located below the thalamus
- (b) Functions
    - i) Regulates parasympathetic and sympathetic systems
    - ii) Regulates the constriction and dilation of blood vessels and controls the beating of the heart
    - iii) Helps to maintain normal body temperature
    - iv) Helps to regulate the amount of food we eat

            - v) Helps regulate water balance
            - vi) Causes an increase of intestinal peristalsis and secretions from the intestinal glands
            - vii) How we react to fear and pleasure
            - viii) Sleep control

- c. Cerebellum
    - (1) Located behind the pons and below the cerebrum
    - (2) All skeletal muscle activity is carried out in the cerebellum.
    - (3) Function
        - (a) Helps the body maintain its balance
        - (b) Maintains muscle control
        - (c) Helps muscles to contract when they should, with the right amount of strength, and with the right amount of time for the movement the body is performing
- d. Brain stem - made up of three parts
    - (1) Pons
        - (a) Located between the front of the cerebellum and between the medulla oblongata and midbrain
        - (b) Functions as a conductive pathway for nerve impulses of the brain and nervous system; contains the center that controls respiration
    - (2) Medulla oblongata
        - (a) Located between the spinal cord and the pons
        - (b) Acts as a passageway for nerve impulses between the brain and spinal cord
            - i) Slows heart rate
            - ii) Controls depth and rate of respiration
            - iii) Controls dilation and constriction of blood vessels
    - (3) Midbrain

- e. Meninges - membranous coverings of the brain
  - (1) Dura mater - outer brain covering which lines the skull on the inside
  - (2) Arachnoid - middle layer
  - (3) Pia mater - covers the brain surface
- f. Cerebrospinal fluid - fills the space between the arachnoid and pia mater; produced in the ventricles of the brain
  - (1) Nutrition
  - (2) Excretion
  - (3) Protection - shock absorber

2. Spinal cord
   - a. Location - starts at the medulla and continues downward; contained within the spinal column
   - b. Function - reflex center and conduction pathway to and from the brain
   - c. Stimuli
     - (1) Mechanical
     - (2) Physical
     - (3) Chemical
   - d. Reflex arc

B. Peripheral nervous system (HO 3) - nerves of the body; connects the central nervous system to the body structures **(II-8)**

1. Cranial nerves - 12 pairs
2. Spinal nerves - 31 pairs

C. Autonomic nervous system

1. Consist of peripheral nerves and ganglia
2. Controls the involuntary, or automatic, activities of our internal organs

3. Made up of two divisions

    a. Sympathetic - prepares our bodies for action when we are afraid, angry, or in a stressful situation

    b. Parasympathetic - will counteract the effect

4. Our emotions influence both divisions.

5. Both divisions are antagonistic to each other; they keep our bodies in balance.

V. Conditions and Changes of the Nervous System

A. Nervous system changes with aging

1. Receptors become less sensitive. For example, the elderly may not be able to see or hear as well.

2. There is a diminished sensitivity to heat and pain. For example, the elderly may burn themselves with hot water.

3. The elderly have slower reflexes. Their balance is not as good as when they were younger and movement cannot be as well coordinated.

4. They don't think as fast, but his does not mean that their intelligence has diminished.

B. Conditions of the nervous system

1. Tolerance to stress is lower in elderly.

2. Confusion - (to be covered in unit XVI)

3. Delusions - delusions are the false interpretation of information despite all evidence to the contrary. The client may think there is someone in the room when there is no one there. Although you tell the client there is no one in the room he/she remains agitated and fearful.

4. Hallucinations - images or sounds originate in the mind and have no relationship to reality. Example - Mr. Jackson may set and talk to someone who is not there or who is even dead. He thinks he sees and hears the person.

5. Paranoia - clients with paranoia have delusions of being persecuted and a false sense of self-importance. They think you are out to get them or you are going to hurt them. Psychiatric care is needed for these clients.

6. Alzheimer's - it is a slow progressive condition that prevents the individual from recognizing familiar objects. Three to ten years after the onset of Alzheimer's, they become unable to reason, lose control of their body functions, and cannot care for their personal needs.

7. Parkinson - symptoms are progressive over many years. Symptoms are tremors of the hands, muscle rigidity, difficult and slow movement, and gradual behavioral changes.

8. Seizures

    a. Absence seizure (formerly called Petite Mal) - momentary loss of consciousness

    b. Focal seizure (formerly called Jacksonian) - one-sided loss of muscular control; usually due to injury

    c. Tonic-Clonic seizure (formerly called Grand Mal) - an aura may occur before the seizure. The person loses consciousness and becomes rigid. Arms and legs move uncontrollably.

9. Cerebrovascular accidents - abnormal conditions of the blood vessels of the brain characterized by occlusion by embolus, thrombus, or cerebrovascular hemorrhage

VI. Summary and Conclusion

A. Terms and definitions

B. The nervous system as a communication network

C. Neurons

D. Divisions of the nervous system

E. Conditions and changes of the nervous system

The nervous system keeps the body coordinated and plays an important part in the sensory system which will be covered in the next unit.

LESSON PLAN: 16

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms in this lesson?
2. What are the qualities necessary for the nervous system to act as a communication network?
3. What is the structure of a neuron?
4. What are the three types of neurons?
5. What are the three divisions of the nervous system?
6. Where are the areas of the brain located on HO 2, brain?
7. What are the functions of the cerebellum, cerebrum, thalamus, hypothalamus, brain stem, and spinal cord?
8. How many cranial nerves are there? How many spinal nerves?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Examine anatomical model of the brain.
2. Have an EEG technician speak to the class.
3. View slide tape series.

ANSWERS TO EVALUATION ITEMS:

1. c
2. d
3. f
4. e
5. a
6. a. It is able to receive stimuli.
   b. It can respond by producing nerve impulses.
   c. It can conduct and coordinate neural information to and from the brain and spinal cord.
7. Axon
8. c

9. Central
Peripheral
Autonomic
10. a. Cerebrum
b. Cerebellum
c. Spinal cord
d. Medulla
e. Pons

11. e
12. d
13. a
14. c
15. b
16. 12
31
17. Sympathetic
Parasympathetic
18. c
19. d
20. b
21. a

LESSON PLAN: 16
COURSE TITLE: HEALTH CARE ASSISTANT CORE
UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with the correct definitions in Column II.

		Column I		Column II
____	1.	Conductivity	a.	Reacts when stimulated
____	2.	Fissure	b.	Matter which contains naked nerve fibers
____	3.	Axon	c.	Ability to transmit to distant points
____	4.	Dendrites	d.	Deep grove of a structure
____	5.	Irritability	e.	A process of the nerve cell that carries impulses toward the cell body
			f.	Structure of a nerve cell which carries impulses away from the cell body

6. List the three qualities which enable the nervous system to act as a communication network.

   a. ______________________________

   b. ______________________________

   c. ______________________________

7. A neuron structure consists of the cell body, synapse, dendrites, and ____________________.

8. What are the three types of neurons (nerve cells)? (Circle the letter of the best answer.)

   a. Stem, lobe, thalamus
   b. Matter, conductivity, cortex
   c. Sensory, motor, connecting
   d. Reflex, pons, cord

9. Name the three divisions of the nervous system.

a.____

b.____

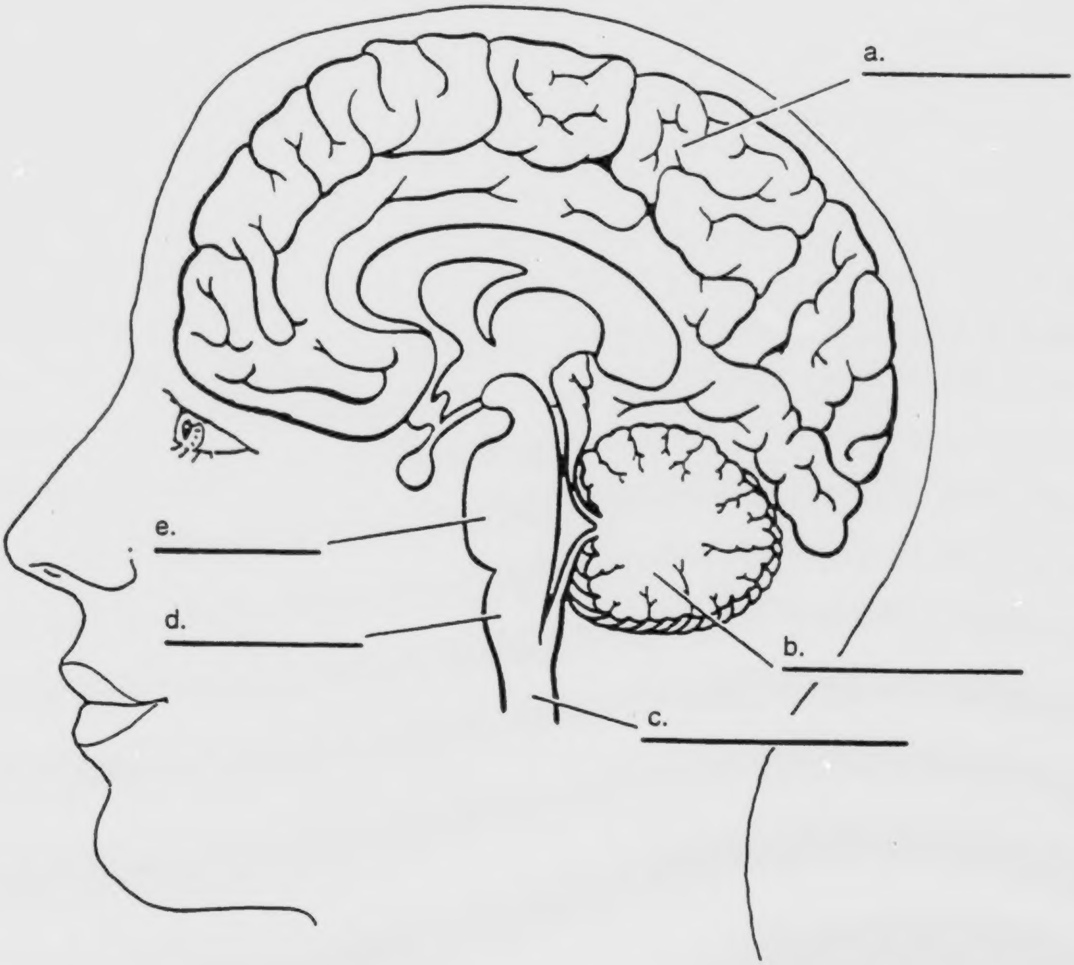
c.____

10. Identify the parts of the brain.

a.____________________ d.____________________

b.____________________ e.____________________

c.____________________



Match the divisions of the brain in Column I with their functions in Column II.

Column I

____ 11. Thalamus

____ 12. Cerebrum

____ 13. Hypothalamus

____ 14. Cerebellum

____ 15. Brain stem

Column II

a. Regulates parasympathetic and sympathetic systems

b. Passageway for nerve impulses between the brain and spinal cord

c. Maintain body balance and muscle control

d. Controls motor functions, eye sight, hearing, and smell

e. A relay station for incoming and outgoing impulses

16. The number of nerves in the peripheral nervous system are cranial nerves __________________ pairs and spinal nerves ______________________ pairs.

17. The autonomic nervous system is made up of two divisions, the _______________________ and ________________________.

Match the conditions and changes in the nervous system in Column I to the correct definitions in Column II.

Column I

____18. Hallucination

____19. Absence seizure

____20. Paranoia

____21. Alzheimer's

Column II

a. A slow, progressive condition that prevents the individual from recognizing familiar objects

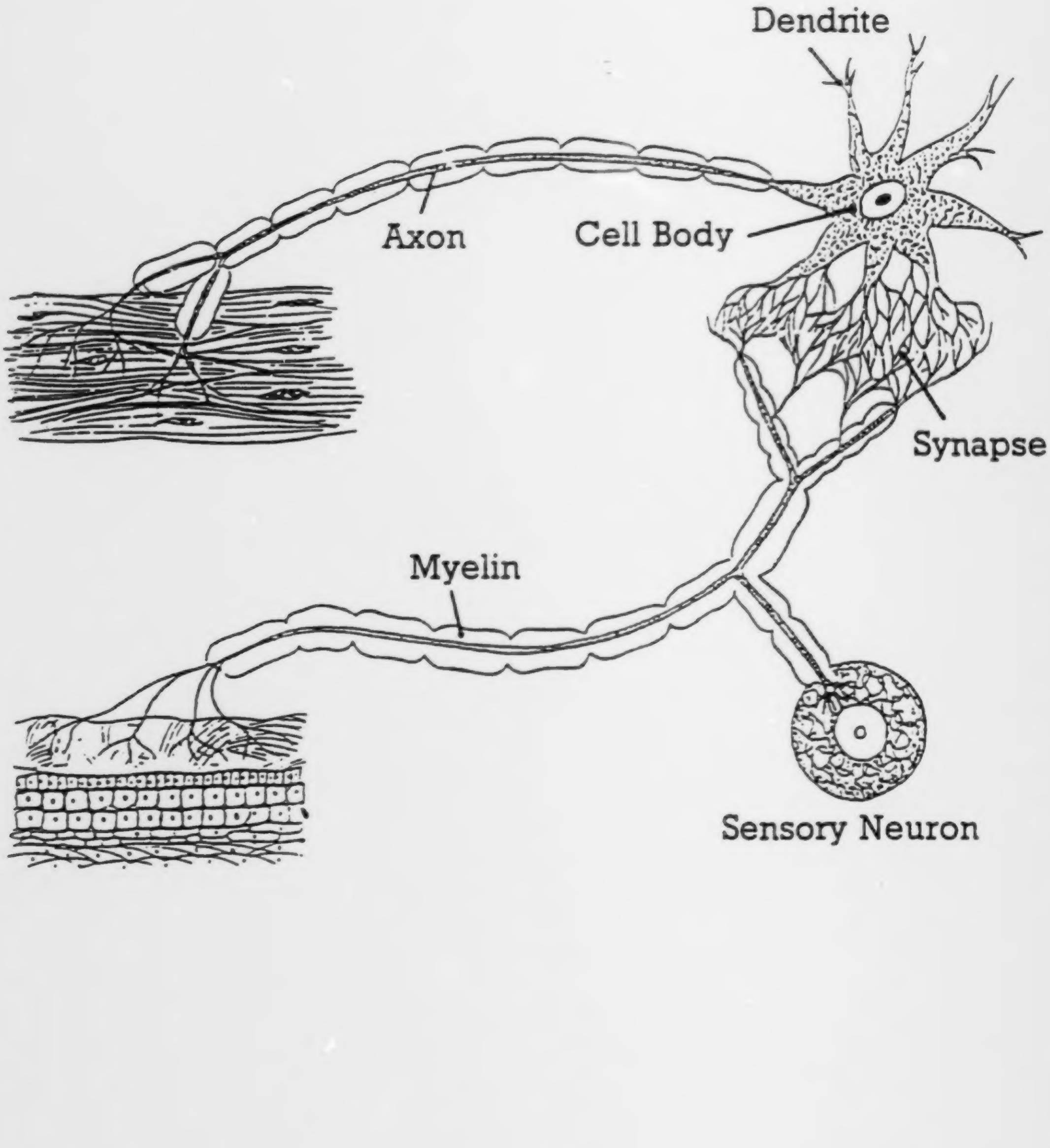
b. The individual has delusions of being persecuted and a false sense of self-importance

c. Images or sounds that originate in the mind and have no relationship to reality

d. Momentary loss of consciousness

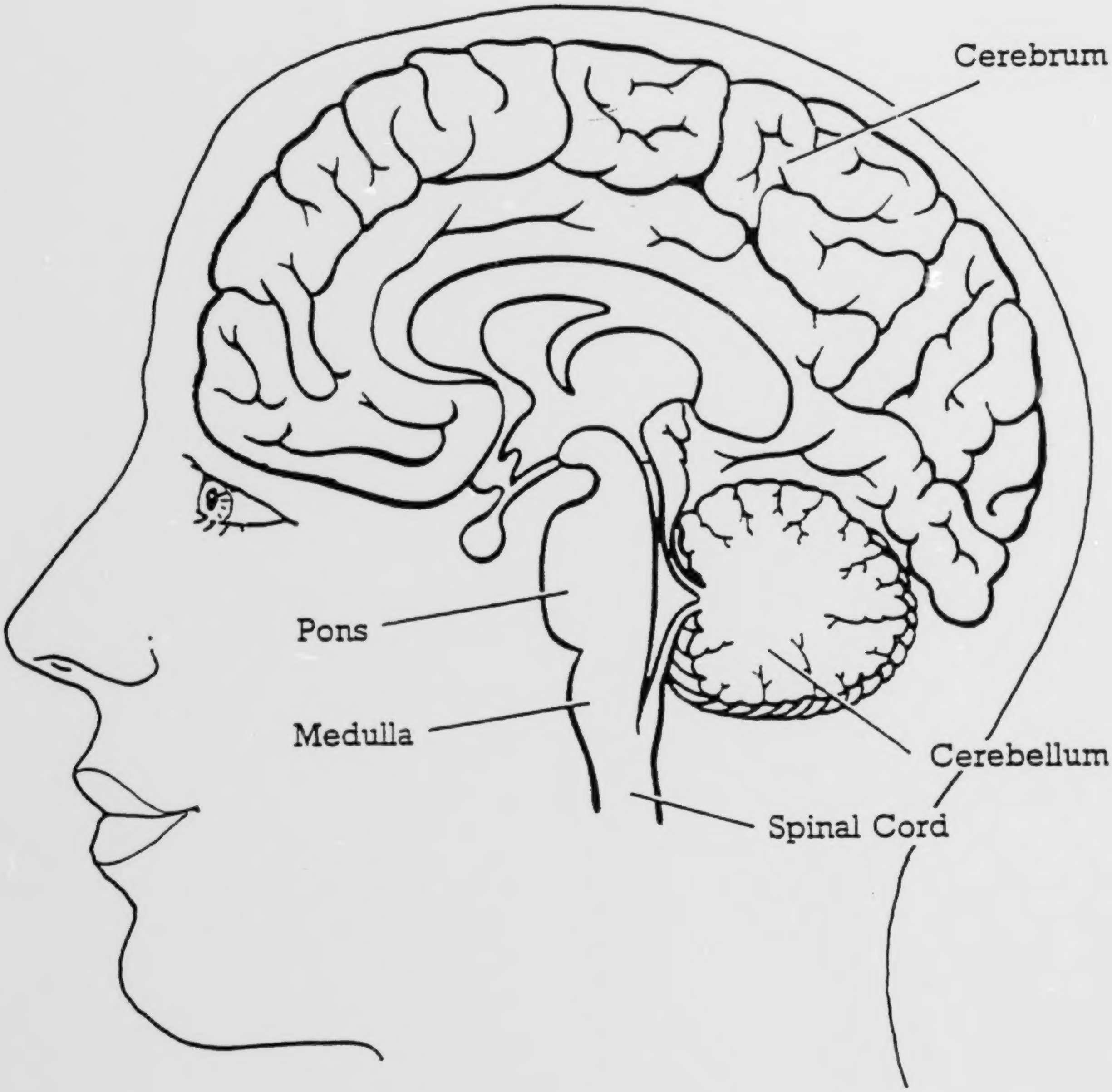
e. One-sided loss of muscular control

NEURON

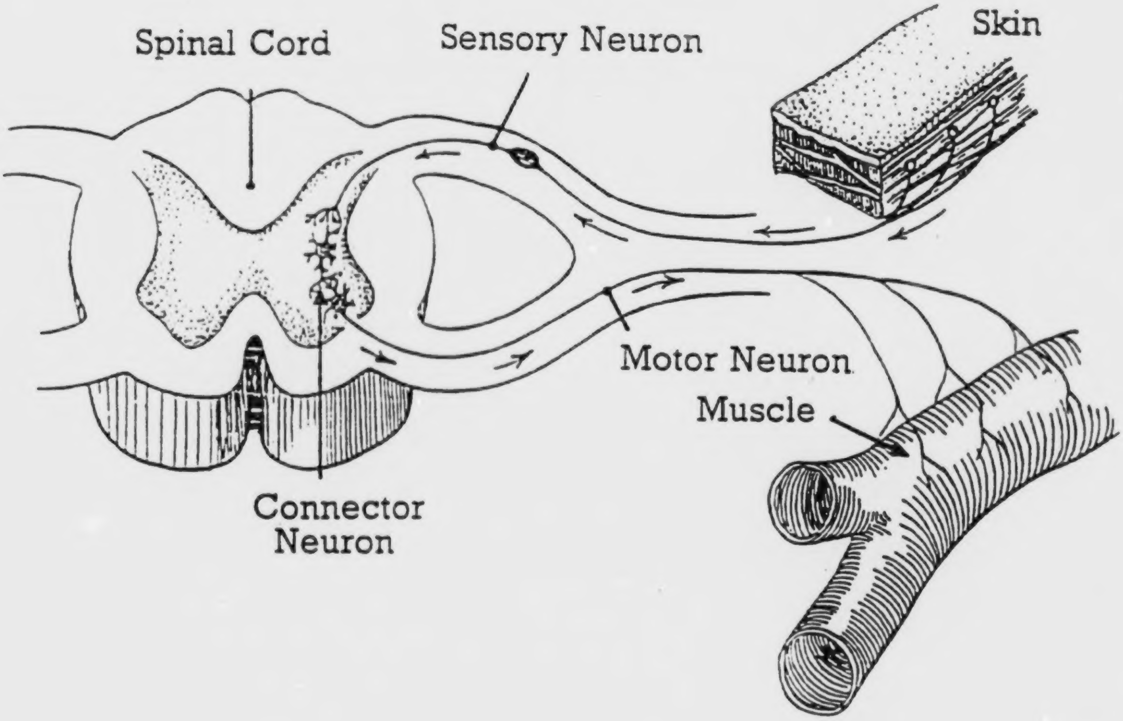

Dendrite
Axon
Cell Body
Synapse
Myelin
Sensory Neuron

HO 2

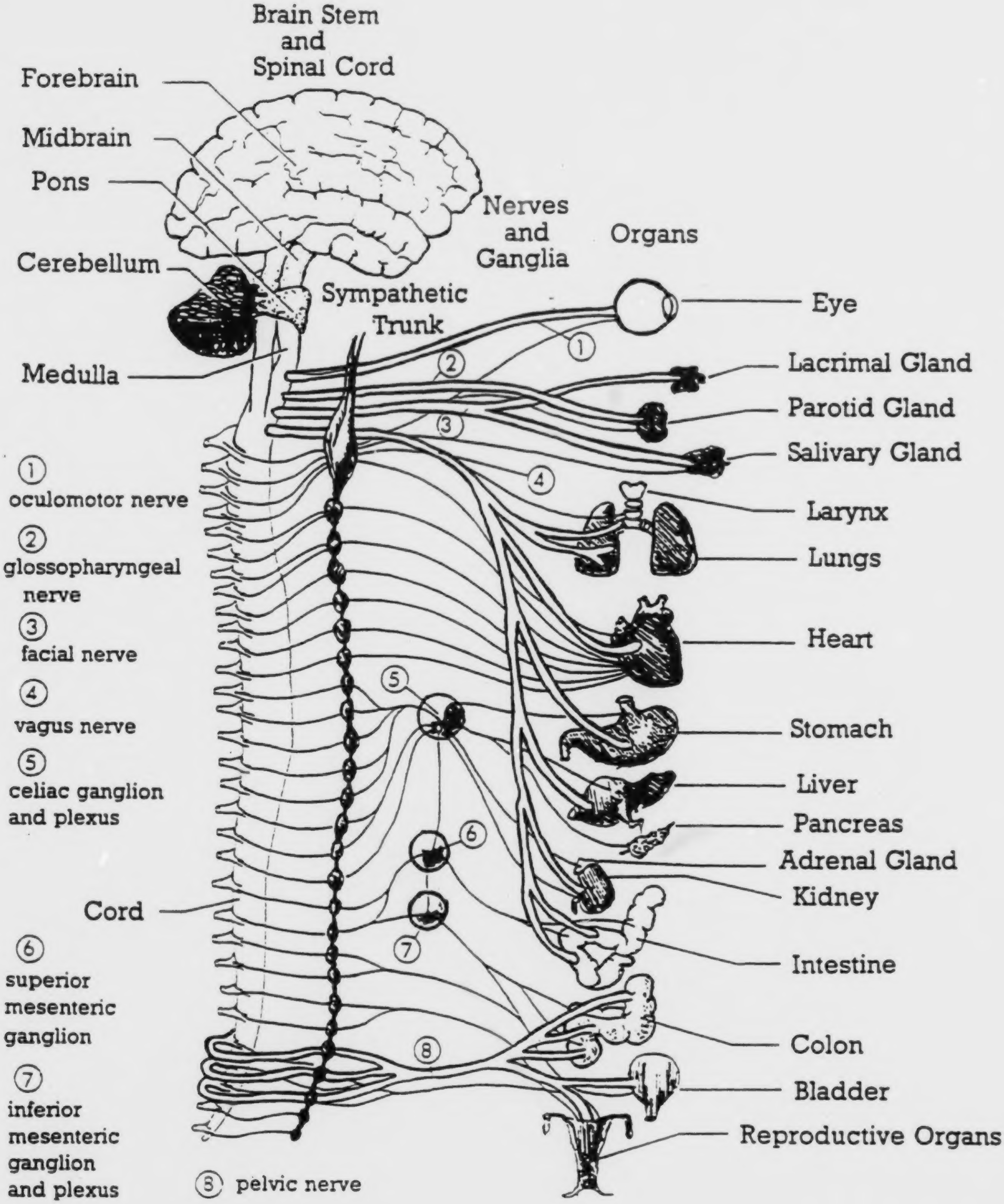
THE BRAIN


Cerebrum
Pons
Medulla
Cerebellum
Spinal Cord

REFLEX ARC


Spinal Cord
Sensory Neuron
Skin
Motor Neuron
Muscle
Connector Neuron

THE NERVOUS SYSTEM


Brain Stem and Spinal Cord
Forebrain
Midbrain
Pons
Cerebellum
Medulla
Nerves and Ganglia
Organs
Sympathetic Trunk
Eye
Lacrimal Gland
Parotid Gland
Salivary Gland
Larynx
Lungs
Heart
Stomach
Liver
Pancreas
Adrenal Gland
Kidney
Intestine
Colon
Bladder
Reproductive Organs
Cord
① oculomotor nerve
② glossopharyngeal nerve
③ facial nerve
④ vagus nerve
⑤ celiac ganglion and plexus
⑥ superior mesenteric ganglion
⑦ inferior mesenteric ganglion and plexus
⑧ pelvic nerve
①
②
③
④
⑤
⑥
⑦
⑧

LESSON PLAN: 17

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-17 OR DEMONSTRATION:

THE SENSORY SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms to their correct definitions.
2. Name the three components of the sensory mechanism.
3. List the five sense receptors and identify where they are located.
4. Identify the functions of the eye and ear.
5. Label the parts of the eye.
6. Label the parts of the ear.
7. Match disorders and conditions of the eye and ear with the correct description.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: The Sensory System - Organs of Taste and Smell
2. HO 2: Eye Structure - The Organ of Sight
3. HO 3: Anatomy of the Ear
4. Anatomy charts
5. Anatomical model

INFORMATIONAL ASSIGNMENT:

Real Lesson Plan 17 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

INTRODUCTION:

Through the actions of the sense organs, people are made aware of themselves and the world around them. In this unit, we will see how a stimulus affects a nerve structure and the processes involved. We will pay particular attention to the eye and the ear.

LESSON PLAN: 17

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Analgesic - pertaining to the giving of a medicine to remove or relieve pain

   B. Ankylosis - complete immobility of bones

   C. Iritis - inflammation of the iris

   D. Nasal - pertaining to the nose

   E. Nasoscope - a lighted instrument to examine the nose

   F. Nasoseptal - pertaining to the nasal septum

   G. Opaque - cloudy; light is unable to pass through

   H. Ophthalmology - study or science of what is known of the eye and its structure

   I. Ophthalmoscope - an instrument to examine the eye

   J. Otalgia - earache or ear pain

   K. Otitis - inflammation of the ear

   L. Otologist - specialist in treating ear disorders

   M. Visual acuity - the relative ability of the eye to see details clearly

II. Components of a Sensory Mechanism **(II-2)**

   A. Receptor - special sense organs are stimulated.

   B. Nerve route - impulses travel along nerve pathway to brain.

   C. Centers in brain - sensations take place in the brain and are mentally referred back to the sense organ. **(II-3)**

III. Classifications of Sensory Receptors (HO 1)

   A. Taste receptors - located in mouth

   B. Smell receptors - located in nose

- C. Vision receptors - located in eyes
- D. Hearing and equilibrium receptors - located in ears
- E. Touch, pressure, and pain receptors - located in skin

IV. Functions of the Eye and Ear

- A. Function of the Eye **(II-4)**
  - 1. Sense organ for vision
    - a. Converts the energy of light into electrical nerve impulses that are interpreted as sight
- B. Function of the Ear
  - 1. Sense organ for hearing
  - 2. Sense organ for balance or equilibrium

V. Eye Structure (HO 2) **(II-5)**

- A. Three layers or coats of the eye
  - 1. Sclera - outer layer; white of the eye
  - 2. Cornea - window of the eye; located very front center of the sclera coat; transparent coat which allows light rays to pass through it
  - 3. Choroid coat - middle layer
    - a. Iris - muscular layer; colored part of eye
    - b. Pupil - circular opening in choroid coat
    - c. Ciliary body - also located on the front part of the middle choroid coat
- B. Lens - lies directly behind the pupil
- C. Retina - innermost coat of the eyeball; contains receptors called rods for night vision and receptors called cones for day vision
- D. Optic nerve
- E. Accessory structures
  - 1. Conjunctiva - lining of the inner surface of the eye lids
  - 2. Lacrimal ducts - tear ducts

        3. Eye muscles

        4. Cavities in the eye

            a. Anterior

            b. Posterior

    F. Eye fluid

        1. Aqueous humor - fluid in front of the lens

        2. Vitreous humor - jelly-like fluid behind the lens **(II-6)**

VI. Ear Structure (HO 3)

    A. External

        1. Auricle

        2. External auditory meatus

    B. Middle - the cavity in the temporal bone

        1. Ear drum - tympanic membrane

        2. Ossicles - 3 small bones; transmit sound waves from the ear drum to the inner ear

            a. Malleus (hammer)

            b. Incus (anvil)

            c. Stapes (stirrup)

        3. Eustachian tube - connects to the pharynx; function is to equalize air pressure in the middle ear with that of outside atmospheric pressure

    C. Inner

        1. Cochlea - spiral-shaped passage; special organ of hearing; contains the cochlear duct which is filled with fluid that vibrates when sound waves from the stirrup bone strikes against it

        2. Auditory nerve

        3. Semicircular canals - help to maintain balance

VII. Disorders and Conditions of Eye and Ear

    A. Disorders of the Eye

1. Cataracts
    a. The lens of the eye becomes opaque and light rays cannot pass through it to reach the retina which results in a loss of vision.
    b. The condition develops slowly and can be corrected with surgery.
2. Glaucoma
    a. It is caused by improper balance of the aqueous humor in the anterior eye cavity.
    b. Pressure builds up in the eye because the fluid does not drain properly.
    c. Pressure against the lens causes damage to the retina and loss of side vision.
    d. This is a very serious condition. If it is found early, it can be treated with medication, but if not detected early, blindness usually occurs.
    e. Acute glaucoma has a rapid onset and must be reported to the charge nurse immediately. The client will complain of nausea and intense pain.
3. Blindness
    a. A person is considered blind when visual acuity is 20/200 or less in the better eye.
    b. A person is considered partially sighted when visual acuity is between 20/70 and 20/200.
    c. Care of the blind client
        (1) Always speak before touching the blind person.
        (2) Remember, a seeing eye dog is a working dog - don't touch the dog.
        (3) Orient the blind person to his/her surroundings.
        (4) Don't change anything in the surroundings without telling him/her.
        (5) Always place articles for personal needs such as water glass and urinal in the same place each day.
        (6) Use the face of a clock to describe placement of food on a tray.
        (7) When ambulating a blind person, don't grab his/her arm. Instead have the client place his/her hand on your arm.

        4. Surgical enucleation - removal of the eye usually due to injury or cancer

    B. Disorders of the ear

        1. Deafness

            a. Conductive hearing loss - caused by disease or injury that interferes with the conduction of sound waves to the inner ear

            b. Sensorineural hearing loss - nerve deafness; results from the malfunction of the inner ear, the auditory nerve, or the auditory center in the brain

        2. Otosclerosis - results from bony ankylosis of the stapes, which interferes with the vibration of the stapes and the transmission of sound to the inner ear

        3. Otitis media - fluid forms in the middle ear; usually results from an obstruction of the eustachian tube; can be caused by infection, allergy, tumors, or sudden changes in altitude

VII. Summary and Conclusion

    A. Components of a sensory mechanism

    B. Classification of sensory receptors

    C. Functions of the eye and ear

    D. Eye structure

    E. Ear structure

    F. Disorders of the eye and ear

The anatomy of the eye and ear and disorders and conditions of the eye and ear were discussed. The next unit is on the endocrine system.

LESSON PLAN: 17

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms presented in this lesson?
2. What are the three components of a sensory mechanism?
3. Where are the sensory receptors located?
4. What are the functions of the eye and ear?
5. Where on the eye anatomy diagram is the location of the sclerotic coat, retina, choroid coat, fovea, vitreous humor, iris, optic nerve, cornea, blind spot, aqueous humor, pupil, and lens?
6. Where on the ear anatomy diagram is the location of the semicircular canals, ear bones, cochlea, ear drum, and eustachian tube?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Invite a speaker from an eye bank in to discuss corneal transplants.
2. Invite a speech therapist or audiologist to speak to the class.
3. Do vision testing with Snellen chart or eye machine if available.
4. Show suggested slide/tapes or films.

ANSWERS TO EVALUATION ITEMS:

1. c
2. a
3. b
4. e
5. d
6. a. Receptor
   b. Nerve route
   c. Centers in the brain

7. a. Touch - skin, finger tips, etc.
   b. Smell - nose
   c. Taste - tongue
   d. Vision - eye

e. Hearing - ear

8. a. 1
b. 6
c. 2
d. 5
e. 7
f. 12
g. 4
h. 11
i. 3
j. 8
k. 10
l. 9

9. a. 2
b. 1
c. 3
d. 5
e. 4

10. d
11. e
12. b
13. a
14. c

LESSON PLAN: 17

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the term in Column I with its definition in Column II.

1. Analgesic
2. Ophthalmology
3. Otalgia
4. Otologist
5. Nasal

a. Study or science of what is known of the eye and its structure

b. Earache or ear pain

c. Pertaining to the giving of a medicine to remove or relieve pain

d. Pertaining to the nose

e. Specialist in treating ear disorders

6. The three components of the sensory mechanism are:

a. ______________________________

b. ______________________________

c. ______________________________

7. List the five sense receptors and identify where they are located.

a. ______________________________

b. ______________________________

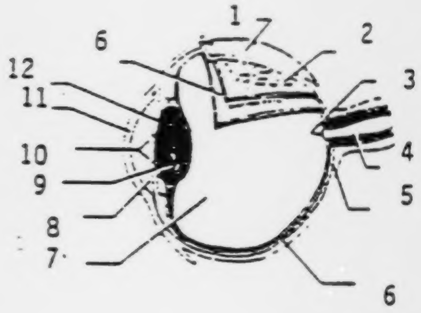
c. ______________________________

d. ______________________________

e. ______________________________

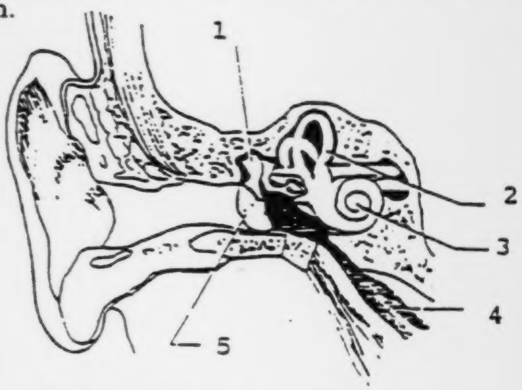
8. Label the parts of the eye by placing the number that labels the eye part in the diagram in the blank next to the corresponding term.

___ a. Sclerotic coat
___ b. Retina
___ c. Choroid coat
___ d. Fovea
___ e. Vitreous humor
___ f. Iris
___ g. Optic nerve
___ h. Cornea
___ i. Blind spot
___ j. Aqueous humor
___ k. Pupil
___ l. Lens



9. Label the parts of the ear by placing the number that labels the ear part in the diagram in the blank next to the corresponding term.

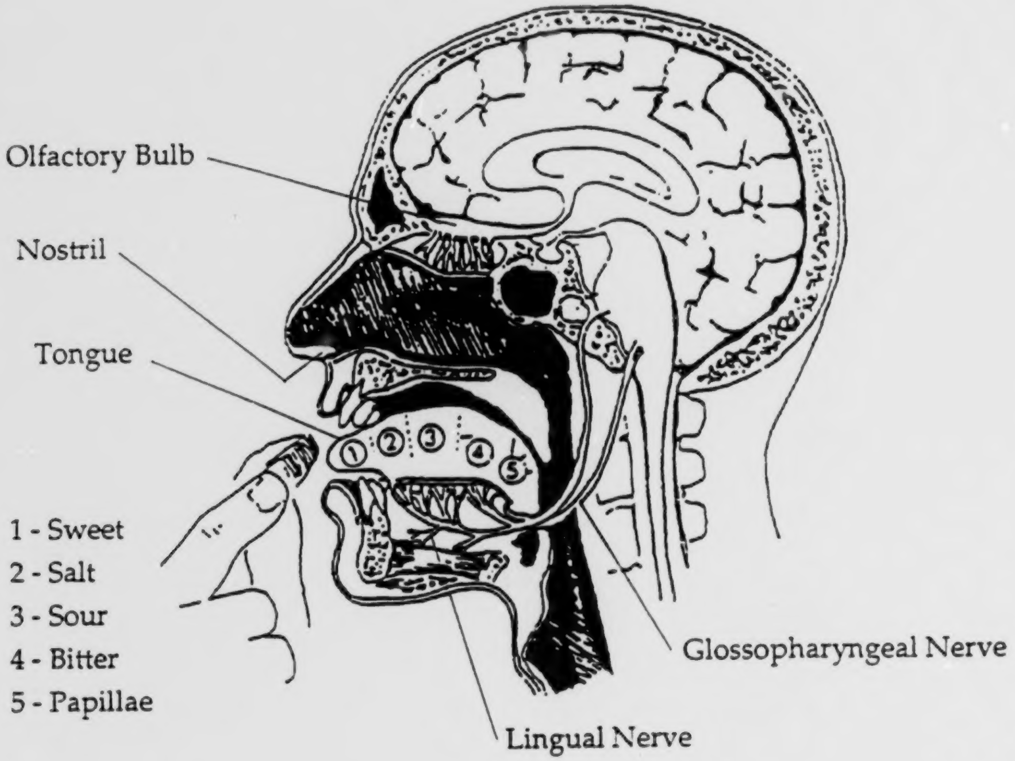
___ a. Semicircular canals
___ b. Ear bones
___ c. Cochlea
___ d. Ear drum
___ e. Eustachian tube



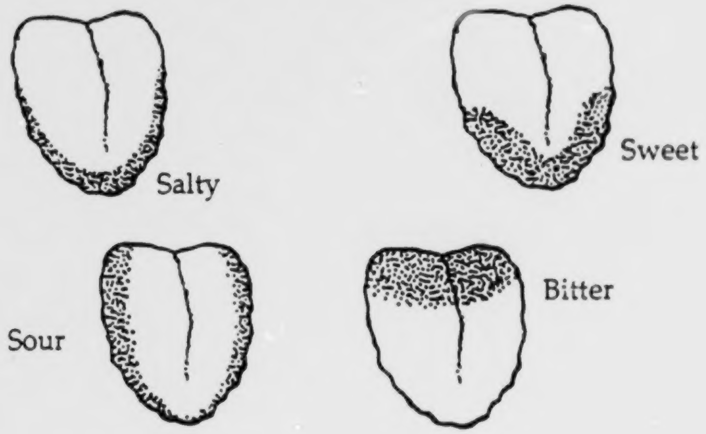
Match the terms in Column I with the correct definition in Column II.

		Column I		Column II
____	10.	Otosclerosis	a.	Removal of the eyes
____	11.	Glaucoma	b.	Formation of fluid in the middle ear
____	12.	Otitis media	c.	Visual acuity is 20/200 or less in the better eye
____	13.	Enucleation	d.	Bony ankylosis of the stapes
____	14.	Blindness	e.	Pressure builds up in the eye because the fluid doesn't drain properly

THE SENSORY SYSTEM - ORGANS OF TASTE AND SMELL

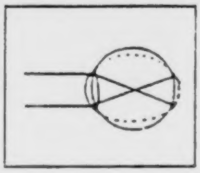

Olfactory Bulb
Nostril
Tongue
1 - Sweet
2 - Salt
3 - Sour
4 - Bitter
5 - Papillae
Glossopharyngeal Nerve
Lingual Nerve
1
2
3
4
5

TASTE LOCATIONS

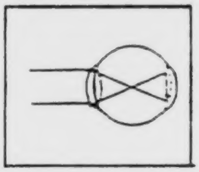

Salty
Sweet
Sour
Bitter

HO 2

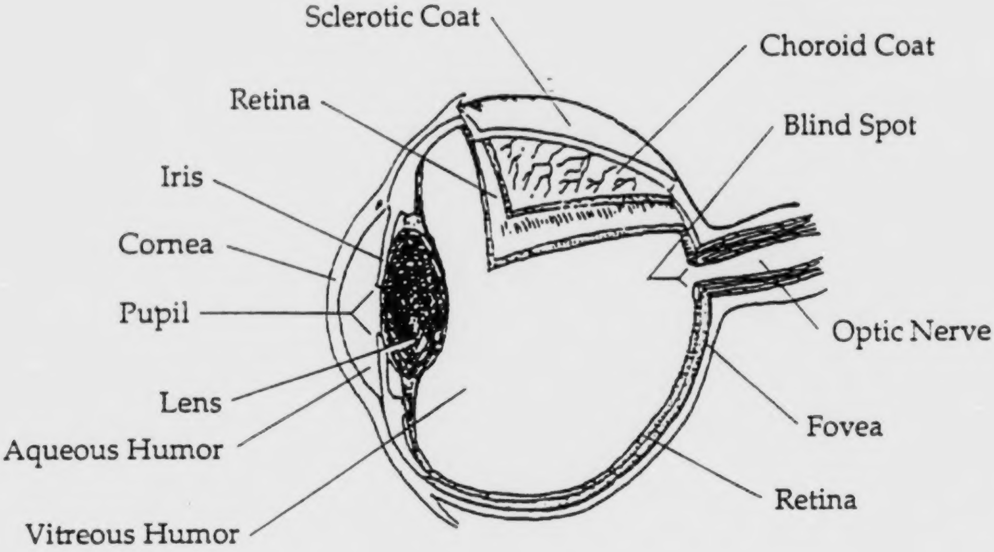
EYE STRUCTURE - THE ORGAN OF SIGHT

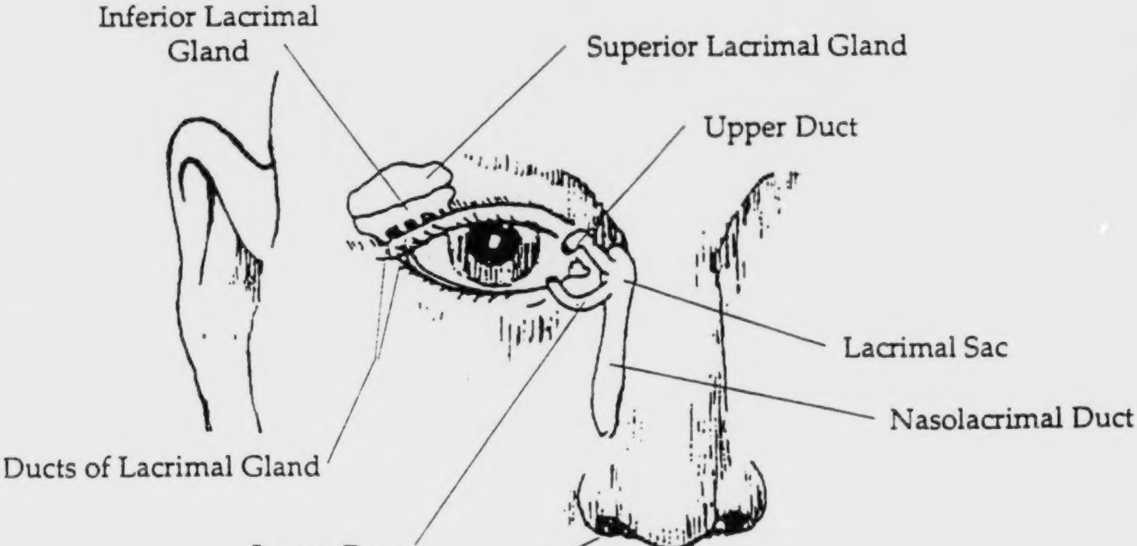


FAR SIGHTED



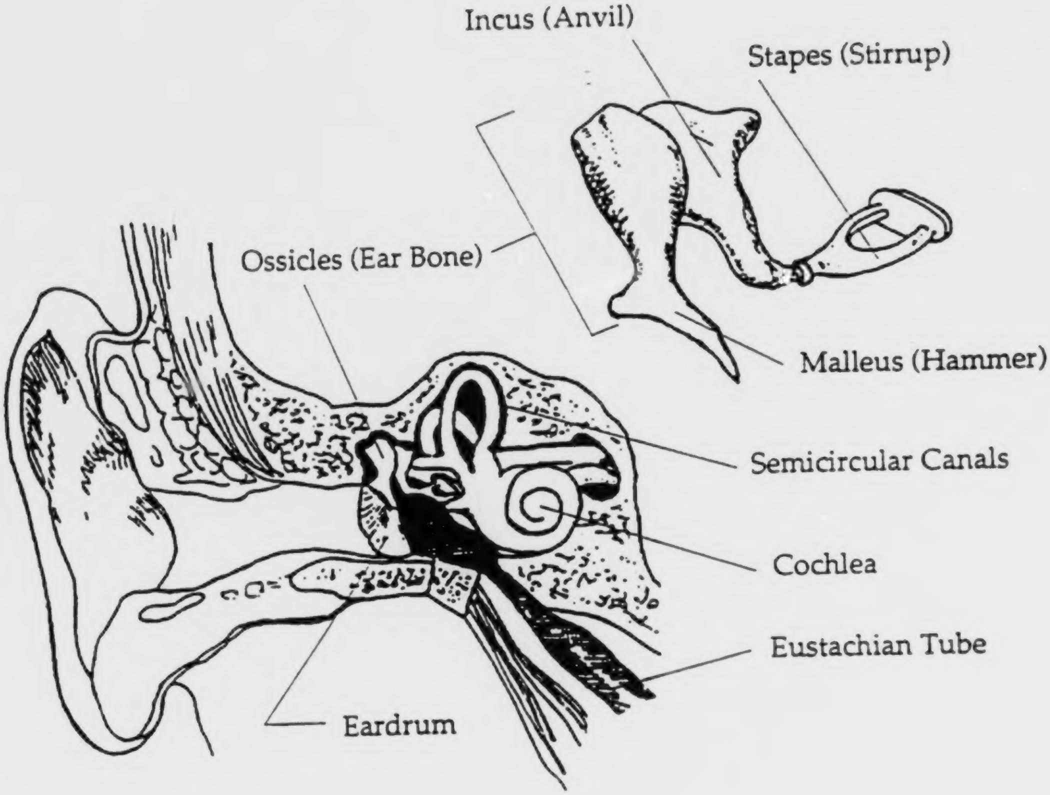
NEAR SIGHTED


Sclerotic Coat
Choroid Coat
Retina
Blind Spot
Iris
Cornea
Pupil
Optic Nerve
Lens
Aqueous Humor
Fovea
Retina
Vitreous Humor


Inferior Lacrimal Gland
Superior Lacrimal Gland
Upper Duct
Lacrimal Sac
Nasolacrimal Duct
Ducts of Lacrimal Gland
Lower Duct
Mouth of Duct (In Nose)

LACRIMAL APPARATUS

ANATOMY OF THE EAR


Incus (Anvil)
Stapes (Stirrup)
Ossicles (Ear Bone)
Malleus (Hammer)
Semicircular Canals
Cochlea
Eustachian Tube
Eardrum

LESSON PLAN: 18

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-18 OR DEMONSTRATION:

ENDOCRINE SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match the terms in this lesson with their correct definitions.
2. Locate and identify the glands of the endocrine system on a diagram.
3. Match the endocrine glands with their functions.
4. Match disorders and conditions of the endocrine system with the correct description or cause.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Endocrine System
2. HO 2: Diabetes

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 18 prior to class and be prepared to discuss the information presented.

REFERENCES:

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

INTRODUCTION:

The endocrine system is composed of a group of ductless glands that secrete substances called hormones into the blood or tissue fluid. The function of the endocrine system is communication and control by hormones. These hormones regulate our body processes. All of the organs of the endocrine system are glands, but not all glands are organs of the endocrine system.

LESSON PLAN: 18

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

   A. Ductless gland - a gland that secretes hormones directly into the blood stream; (an endocrine gland)

   B. Endocrine gland - an organized group of tissues that use materials from the blood or lymph to produce hormones

   C. Exocrine or duct gland - a gland that discharges its secretions into ducts; are not endocrine glands

   D. Gland - any organ that produces a secretion

   E. Hormones - protein substance secreted by endocrine glands directly into the blood stream; circulated to another part of the body where it stimulates increased activity by chemical action

   F. Pancreatectomy - surgical removal of the pancreas

   G. Pancreatic - pertaining to the pancreas

   H. Pancreatitis - inflammation of the pancreas

   I. Secrete - to produce and expel a special substance

   J. Thyrocele - a tumor of the thyroid gland; a goiter

   K. Thyropenia - decreased or deficient activity of the thyroid

II. Glands of the Endocrine System (HO 1) **(II-2, 3)**

   A. Pituitary gland - the master gland

      1. Size of a pea

      2. Located deep in the cranial cavity in the small depression of the sphenoid bone; attached to the hypothalamus

3. Has two lobes

a. Posterior lobe

(1) Does not produce any hormones

(2) Stores the antidiuretic hormone and oxytocin (promotes milk ejection and causes the muscles of the uterus to contract) which are produced by the hypothalamus gland

b. Anterior lobe - secretions

(1) Thyroid stimulating hormone - stimulates growth and secretion of the thyroid gland

(2) Adrenocorticotrophic hormone - stimulates growth and secretion of the adrenal cortex

(3) Follicle stimulating hormone - controls growth of ovarian follicle and secretion of estrogen in female and production of sperm in male

(4) Interstitial cell stimulating hormone - stimulates the secretion of testosterone in males

(5) Lactogenic hormone - stimulates the secretion of milk and is responsible for maternal behavior in females

(6) Growth hormone - responsible for the body's growth

B. Pineal gland

1. It is located in the skull beneath the brain.

2. The exact function of this gland is unknown; but is thought to regulate sexual development. Melatonin is believed to be the only hormone secreted by the pineal gland.

3. It gets smaller as we age.

C. Thyroid glands

1. Located in the neck, just in front of the larynx by the Adam's apple; shaped like a butterfly

2. Secretes

a. Thyroxin (thyroid hormone) - helps to regulate the metabolic rate of the body. In other words it is responsible for the release of energy for food to our cells and energy production.

b. Calcitonin - controls calcium concentration in the blood; it decreases calcium absorption from bone into the blood.

D. Parathyroid glands

1. Four tiny glands embedded in the back of the thyroid gland

2. Secrete parathyroid hormone - controls the use of calcium and phosphorus in the body; increases calcium absorption from bone into the blood

E. Thymus gland

1. It is an endocrine gland and an organ of the lymphatic system.

2. It is located anterior and superior to the heart and under the sternum.

3. It begins to disappear at puberty.

4. It secretes thymosin which develops and aids in the functioning of the body's immune system.

F. Adrenal gland

1. An adrenal gland is located on top of each kidney (a total of two adrenal glands).

2. Parts of each endocrine gland

    a. Adrenal cortex is the outer part. Adrenal cortex secretes three groups of corticoids.

        (1) Glucocorticoids

            (a) Helps maintain normal glucose concentration

            (b) Helps maintain normal blood pressure

            (c) Has an anti-inflammatory effect

            (d) Has an anti-immunity and anti-allergy effect

            (e) Helps control stress

        (2) Mineralocorticoid - helps control the amount of certain mineral salts in the blood

        (3) Androgens - responsible for male characteristics

    b. Medulla - inner part

        (1) Secretes epinephrine and norepinephrine

(2) Function is to very quickly act to stress responses and help our bodies resist stress. (fight or flight)

G. Islands of Langerhans

1. Very small cells are scattered throughout the pancreas.

2. There are two types of cells in the islands of Langerhans.

a. Alpha cells - secretes glucagon which increases the level of glucose in the blood stream

b. Beta cells - produce insulin which helps to maintain a normal blood glucose level

H. Gonads - sex glands

1. Male - testes

a. Produce testosterone

b. Responsible for male characteristics

2. Female - ovaries; when stimulated by the pituitary gland, they secrete progesterone and estrogen.

a. Progesterone - helps to maintain pregnancy

b. Estrogen - responsible for female characteristics

III. Disorders and Conditions of the Endocrine System **(II-4)**

A. Diabetes mellitus - the body is unable to utilize glucose to meet the energy needs of the body. There is decreased secretion of insulin and this creates a disturbance of carbohydrate metabolism. (HO 2)

B. Hypothyroidism - there is insufficient secretion of thyroxin from the thyroid gland.

C. Hyperthyroidism - the thyroid gland secretes an excessive amount of hormone.

D. Cushing's syndrome - it is caused by an overactive adrenal gland.

E. Addison's disease - it is caused by an underactive adrenal cortex.

F. Gigantism - it is caused by an overactive pituitary gland.

G. Dwarfism - it is due to an underactive pituitary gland.

H. Cretinism - due to underactive thyroid gland; characterized by retarded physical and mental growth.

IV. Summary and Conclusion

  A. Terms and definitions

  B. Glands of the endocrine system

  C. Disorders and conditions of the endocrine system

In this lesson we have discussed the glands of the endocrine system and how they are related to the disorders and conditions of the endocrine system. The next unit is on the urinary system.

LESSON PLAN: 18

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms used in this lesson?
2. Where are the endocrine glands located?
3. What is a major function of each endocrine gland?
4. What are the causes of disorders and conditions of the endocrine system discussed in this lesson?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Assign short reports on abnormalities of endocrine system (dwarfism, gigantism, etc.).

ANSWERS TO EVALUATION ITEMS:

1. b
2. e
3. f
4. a
5. c

6.
    a. Pituitary
    b. Thyroid
    c. Parathyroid
    d. Thymus
    e. Adrenal
    f. Pancreas
    g. Ovaries
    h. Testes

7. e
8. d
9. a
10. c
11. g
12. f
13. b
14. c
15. d
16. b
17. e
18. a

LESSON PLAN: 18

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with the correct definitions in Column II.

Column I

____ 1. Ductless gland

____ 2. Exocrine gland

____ 3. Secrete

____ 4. Gland

____ 5. Endocrine gland

Column II

a. Any organ that produces a secretion

b. A gland that secretes hormones directly into the blood stream

c. An organized group of tissues which use material from the blood or lymph to produce hormones

d. Master gland of the body

e. A gland that discharges its secretions into ducts

f. To produce and expel a special substance

6. Identify the glands of the endocrine system indicated on the diagram.

a.

b.

c.

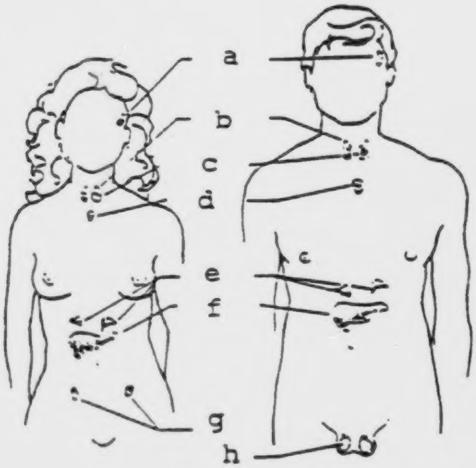
d.

e.

f.

g.

h.



Match the gland in Column II to its function in Column I.

Column I

____ 7. Secrete insulin

____ 8. Secrete epinephrine

____ 9. Stimulate growth and development

____ 10. Regulate calcium and phosphorus

____ 11. Secrete estrogen

____ 12. Secrete testosterone

____ 13. Regulate metabolism

Column II

a. Pituitary

b. Thyroid

c. Parathyroid

d. Adrenal

e. Pancreas

f. Testes

g. Ovaries

Matching the terms in Column I to the correct definitions in Column II.

Column I

____ 14. Addison's disease

____ 15. Dwarfism

____ 16. Cushing's syndrome

____ 17. Hyperthyroidism

____ 18. Cretinism

Column II

a. Characterized by retarded and mental growth

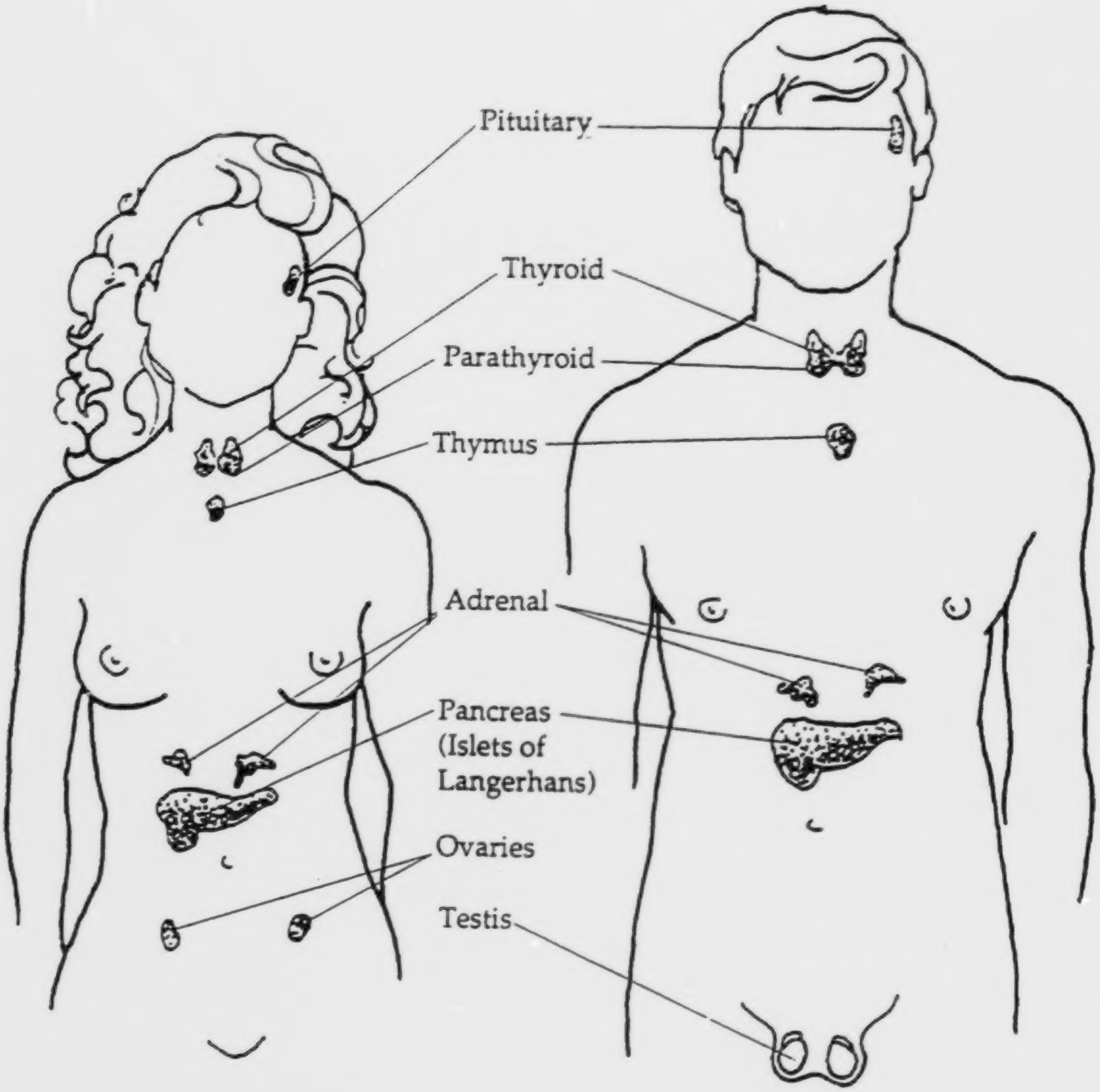
b. Caused by an overactive adrenal gland

c. Caused by an underactive adrenal cortex

d. Due to underactive pituitary gland

e. The thyroid gland excretes an excessive amount of hormone

ENDOCRINE SYSTEM


Pituitary
Thyroid
Parathyroid
Thymus
Adrenal
Pancreas
(Islets of
Langerhans)
Ovaries
Testis

DIABETES

I. Description - Diabetes mellitus is a chronic metabolic disease. The body does not secrete enough insulin and the body is unable to utilize foods properly for energy. Diabetes Mellitus can develop at any age but is more frequent at age 40 or over.

II. Types (classification system was changed in 1979)

  A. Type I - The client is insulin dependent.

  B. Type II - The client is non-insulin dependent.

III. Cause - The cause is unknown, but individuals with a family history of diabetes and individuals who are overweight are at risk of developing diabetes.

IV. Signs and symptoms

  A. Fatigue (tired)

  B. Weight loss without dieting

  C. Inflammation of the vaginal area (vaginitis)

  D. Lesions and sores which take a long time to heal

  E. Sugar in the urine (glycosuria)

  F. Frequent urination (polyuria)

  G. Excessive thirst (polydipsia)

  H. Impairment of vision

  I. Increased hunger (polyphagia)

V. Complications - hypoglycemia and hyperglycemia

  A. Hypoglycemia is low blood sugar. It can lead to insulin shock.

    1. Cause

      a. Not eating all of the food prescribed by the physician or missing a meal

      b. Too much activity for the amount of food eaten

      c. Taking too much insulin

    2. Symptoms (usually occur suddenly)

    a. Profuse perspiration, skin cold, clammy, pale
    b. Weak, dizzy, complains of feeling faint
    c. Hunger
    d. Nervous, irritable, excitable
    e. Shallow, rapid respirations
    f. Pulse may be normal or slow and bounding
    g. Vision blurred
    h. Glucose in urine and sugar in blood are low when tested.

  3. If the client is awake, the charge nurse may instruct you to give him/her some type of sugar, such as orange juice.

B. Hyperglycemia is high blood sugar. It can lead to diabetic coma.

  1. Cause
    a. Occurs when the client doesn't have enough insulin to meet the needs of his/her body
    b. The client forgets to take his/her insulin
    c. Medications
    d. Dehydration
    e. Injury
    f. Infection

  2. Symptoms (usually occur slowly)
    a. The first symptoms are usually that the client appears confused, appears very drowsy, or complains of a headache.
    b. There is a fruity odor to the breath.
    c. The skin is flushed and dry.
    d. Pulse is rapid and weak.
    e. Blood pressure is low.
    f. Nausea and vomiting
    g. Loss of appetite

        h. Respirations are deep, rapid, and labored.

        i. Loss of consciousness

    3. The treatment is administering insulin, which is done by the charge nurse

VI. Responsibilities of the health care assistant

- A. Know the symptoms of hyperglycemia and hypoglycemia.
- B. Know where orange juice, sugar, crackers, and milk are kept on the unit.
- C. Make certain the diabetic client has the correct meal tray.
- D. Note and report food the client ate or if he/she did not eat the food on meal tray. Notify the charge nurse if a client does not like a food on meal tray.
- E. Give daily foot care and report anything unusual to the charge nurse.
- F. Look for sores or injury to the skin and report to the charge nurse.

VII. Treatment

- A. Diet - the most important treatment to control the condition
    - 1. The diet is prescribed by a physician. When prescribing the diet, the physician considers the client's height, weight, age, sex, activity level, and dietary habits.
    - 2. Exchange list is used. A list of substitutions and exchanges are provided so that the diet can be varied.
- B. Insulin and oral hypoglycemia drugs are ordered by the physician if the condition cannot be controlled by diet.

Credits:

Hegner, Barbara; Ester Caldwell. Geriatric: A Study of Maturity. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 36.

Schniedman, Rose; Susan Lambert; Barbara Wander. *Being a Nurse Assistant*, 5th ed. Englewood Cliff, N.J.: Prentice Hall, 1989, Unit 35.

Sorrentino, Sheila A. *Textbook for Nursing Assistants*, 3rd ed. St. Louis, MO: Mosby-Year Book, Inc., 1992, Chapter 16.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 14.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 11.

LESSON PLAN: 19

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-19 OR DEMONSTRATION:

URINARY SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms in this lesson with their correct definitions.
2. Identify the functions of the urinary system.
3. Label the organs of the urinary system.
4. Label the parts of the kidney.
5. Describe a nephron.
6. Identify the functions of the ureters.
7. Describe how urine leaves the bladder.
8. List the functions of the urethra.
9. Identify normal and abnormal substances in urine.
10. Identify disorders and conditions of the urinary system.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: The Urinary System
2. HO 2: Cross Section of a Kidney

3. HO 3: Nephron

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 19 prior to class and be prepared to discuss the information presented.

REFERENCES:

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed. St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed. Philadelphia, PA: W. B. Saunders Company, 1992.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

INTRODUCTION:

In this unit we will study the structure and function of the urinary system. The study of the urinary system is called urology. A physician who specializes in this field is called a urologist. The function of the urinary system is to excrete the waste products of water, urine, and salts from the body.

LESSON PLAN: 19

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

A. Acetone - ketone bodies that appear in the urine

B. Adipose capsule - a mass of fat tissue that encloses each kidney and its blood vessels

C. Albuminuria - presence of serum albumin in the urine

D. Anuria - diminution of urinary secretions to 100 cc or less in 24 hours

E. Dysuria - painful urination

F. Glycosuria - sugar in the urine

G. Hematuria - presence of blood in the urine

H. Ketone body - acids produced during fat catabolism

I. Melanuria - black or dark discoloration of the urine

J. Micturition - voiding or urination

K. Nocturia - excessive urination at night

L. Oliguria - diminution of urinary secretions to between 100 and 400 cc in 24 hours

M. Polyuria - excessive secretion of urine

N. Pyelitis - inflammation of the pelvis of the kidney

O. Pyuria - the presence of pus in the urine

P. Renal colic - pain caused by passing a kidney stone

Q. Renal fascia - a tough, fibrous tissue that covers the adipose capsule

R. Renal pelvis - funnel-shaped structure located at the upper end of each ureter

S. Urinary retention - no urine is voided

T. Urinary suppression - kidneys do not produce any urine but the bladder retains the ability to empty

II. Functions of the Urinary System **(II-2)**

A. To produce urine

B. Eliminate urine from the body

III. Organs of the Urinary System (HO 1) **(II-3)**

A. Two kidneys

B. Two ureters

C. One bladder

D. One urethra

IV. Kidneys (HO 2) **(II-4)**

A. Location

1. The bean-shaped kidneys rest high against the dorsal wall of the abdominal cavity.
2. Put your hands on your hips with your thumbs above your hipbones. Your kidneys are located at the placement of your thumbs.
3. They lie on either side of the vertebral column and between the peritoneum and the back muscle.
4. They are between the 12th thoracic and the 3rd lumbar vertebrae.
5. The right kidney is lower than the left. This is due to the location of the liver.

B. Internal structure

1. Cortex
    a. Outer part of kidney
    b. Contains the renal corpuscles of the nephron units
2. Medulla - the inner portion of the kidney
3. Pyramids - triangular-shaped divisions of the medulla of the kidney
4. Papilla - innermost end of a pyramid
5. Pelvis - expanded end of the upper part of the ureter
6. Calyx - division of the renal pelvis

C. Form urine by: filtration, reabsorption, and secretion

V. Nephron (HO 3) **(II-5)**

A. Millions of structural units which make up the kidney

B. Parts of a nephron

1. Afferent arteriole - carries blood from the renal artery

2. Bowman's capsule - top of the nephron; surrounds the glomerulus

3. Glomerulus - network of blood capillaries tucked into the Bowman's capsule

4. Renal tubule

a. Proximal convoluted tubule - first part of the renal tubule

b. Loop of Henle - extension of the proximal tubule

c. Distal convoluted tubule - extension of loop of henle

d. Collecting tubule - straight extension of distal tubule

VI. Ureters - There are two ureters, one from each kidney. Their function is to carry urine from the kidneys to the bladder. **(II-6)**

VII. Bladder **(II-7)**

A. Located in the pelvis behind the pubic symphysis

B. Stores approximately one pint of urine

C. Urine leaves the bladder by way of the urethra and out the urinary meatus.

VIII. Urethra **(II-8)**

A. Lowest part of urinary tract

B. External opening is the meatus

C. Female urethra - serves as passageway for urine; 1 ½ inches long

D. Male urethra - serves as passageway for urine and semen; 8 inches long

IX. Urine

A. Normal findings - acid, 95 percent water, nitrogenous waste products (urea), excess minerals (sodium, potassium, calcium, etc.), toxins, hormones, yellow pigment.

(II-9)

B. Abnormal findings - blood, glucose, pus, casts, and albumin

X. Disorders and Conditions of the Urinary System **(II-10)**

A. Renal calculi - kidney stones

B. Uremia - renal failure; develops gradually due to changes in blood vessels which serve the kidney, or to aging or hypertension

C. Cystitis - inflammation of the bladder

D. Nephritis - inflammation of the kidney

XI. Summary and Conclusion

A. Terms and definitions

B. Functions of the urinary system

C. Organs of the urinary system

D. Kidneys

E. Nephron

F. Ureters

G. Bladder

H. Urethra

I. Urine

J. Disorders and conditions of the urinary system

This lesson has included terms and definitions pertaining to the urinary system and the structure and function of the organs of the urinary system. The next lesson will be on the reproductive system.

LESSON PLAN: 19

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What is the definition of each term presented in this lesson?
2. What is the function of the urinary system.
3. Where are the kidneys, ureters, bladder, and urethra located?
4. Where are the medulla, renal pelvis, ureter, and cortex located in the kidney?
5. What is the nephron?
6. What is the function of the ureters?
7. How does urine leave the bladder?
8. What are the functions of the urethra?
9. What are normal findings in the urine?
10. How do you describe renal calculi, uremia, cystitis, and nephritis?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. If possible, visit a dialysis unit.
2. On an anatomical model, name and locate the organs of the urinary system.
3. Assign reports or panel discussions on diseases of the urinary system and/or progress made to help residents.

ANSWERS TO EVALUATION

1.	c
2.	e
3.	f
4.	a
5.	h
6.	d
7.	b
8.	d

9. a. Kidneys
   b. Ureter
   c. Bladder
   d. Urethra

10. a. Medulla
    b. Renal pelvis
    c. Ureter
    d. Cortex

11. Kidney
12. Ureters
13. Urethra
14. Meatus

15. a. A
    b. N
    c. N
    d. A
    e. N
    f. A
    g. N
    h. A

16. c

LESSON PLAN: 19

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

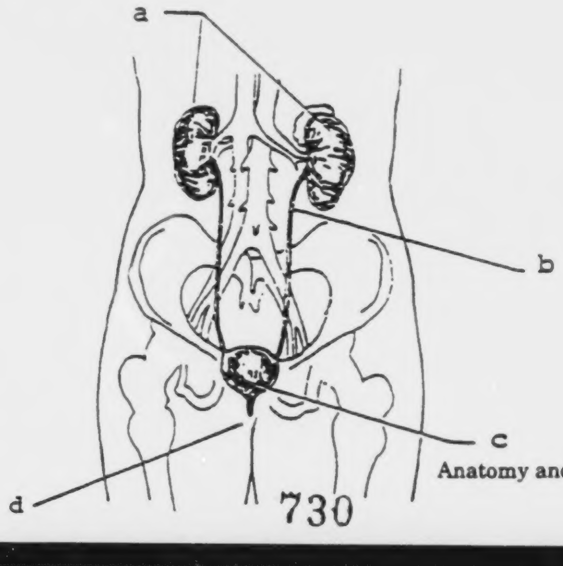
Column I	Column II
____ 1. Glycosuria	a. Pain caused by passing a kidney stone
____ 2. Polyuria	b. The presence of pus in the urine
____ 3. Urinary retention	c. Sugar in the urine
____ 4. Renal colic	d. Blood in the urine
____ 5. Dysuria	e. Excessive secretion of urine
____ 6. Hematuria	f. No urine is voided
____ 7. Pyuria	g. Kidneys do not produce any urine
	h. Painful urination

8. The function of the urinary system is to: (Circle the letter of the best answer.)

   a. Inhale air and exchange body gases.
   b. To fight infection and produce antibodies.
   c. To serve as the framework for the body.
   d. To produce and eliminate urine.

9. Label the parts of the urinary system indicated on the diagram below.

   a.
   b.
   c.
   d.



Anatomy and Physiology, page 5.365

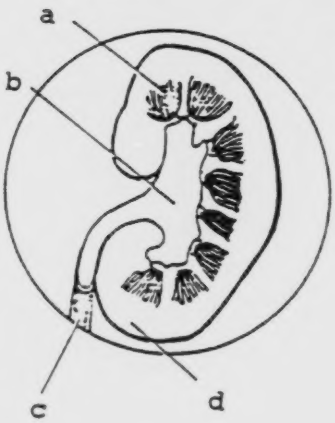
10. Label the parts of the kidney shown on the diagram.

a.

b.

c.

d.



11. Nephrons are millions of structural units which make up the ______________________.

12. ______________________ carry urine from the kidneys to the bladder.

13. Urine leaves the bladder by way of the ______________________.

14. The external opening of the urethra is the ______________________.

15. Write "A" before substances which are abnormal in urine. Write "N" before those substances which are normal constituents of urine.

____ a. Glucose

____ b. Water

____ c. Urea

____ d. Blood

____ e. Toxins

____ f. Pus

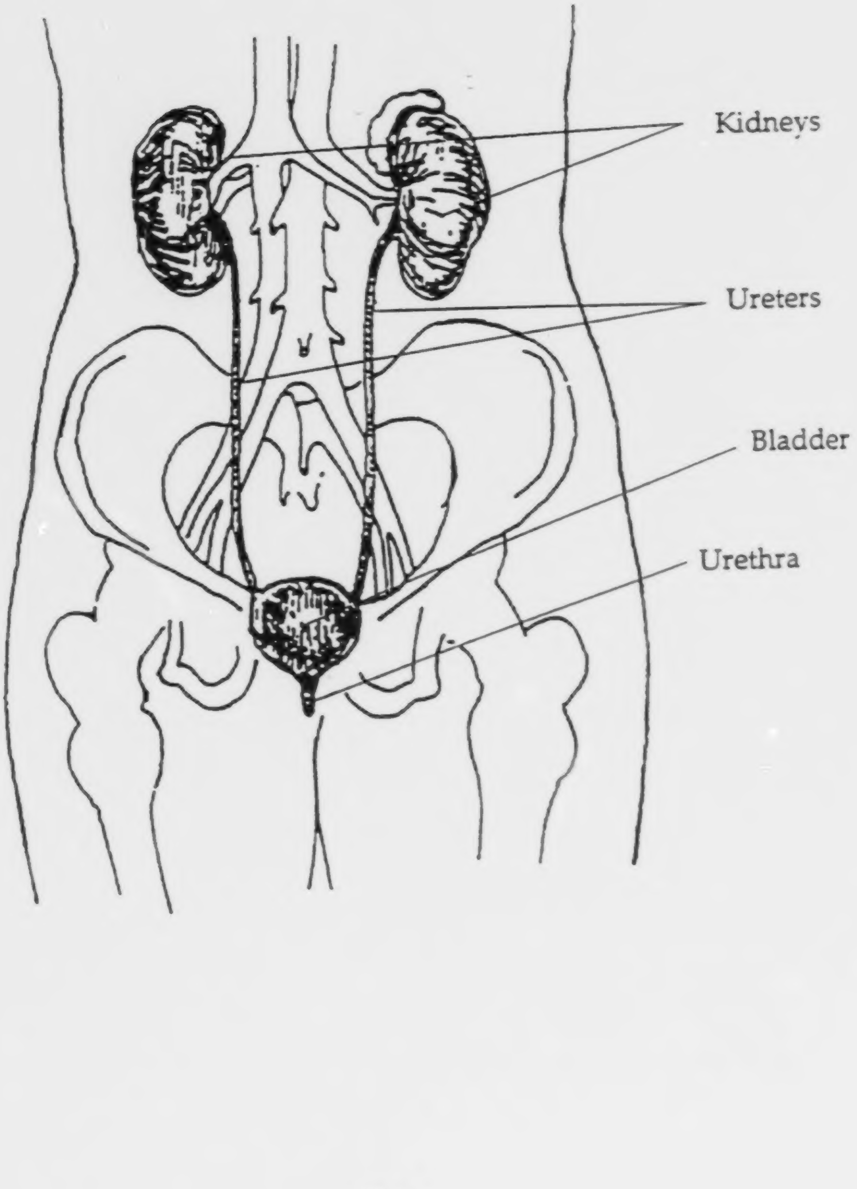
____ g. Salt

____ h. Albumin

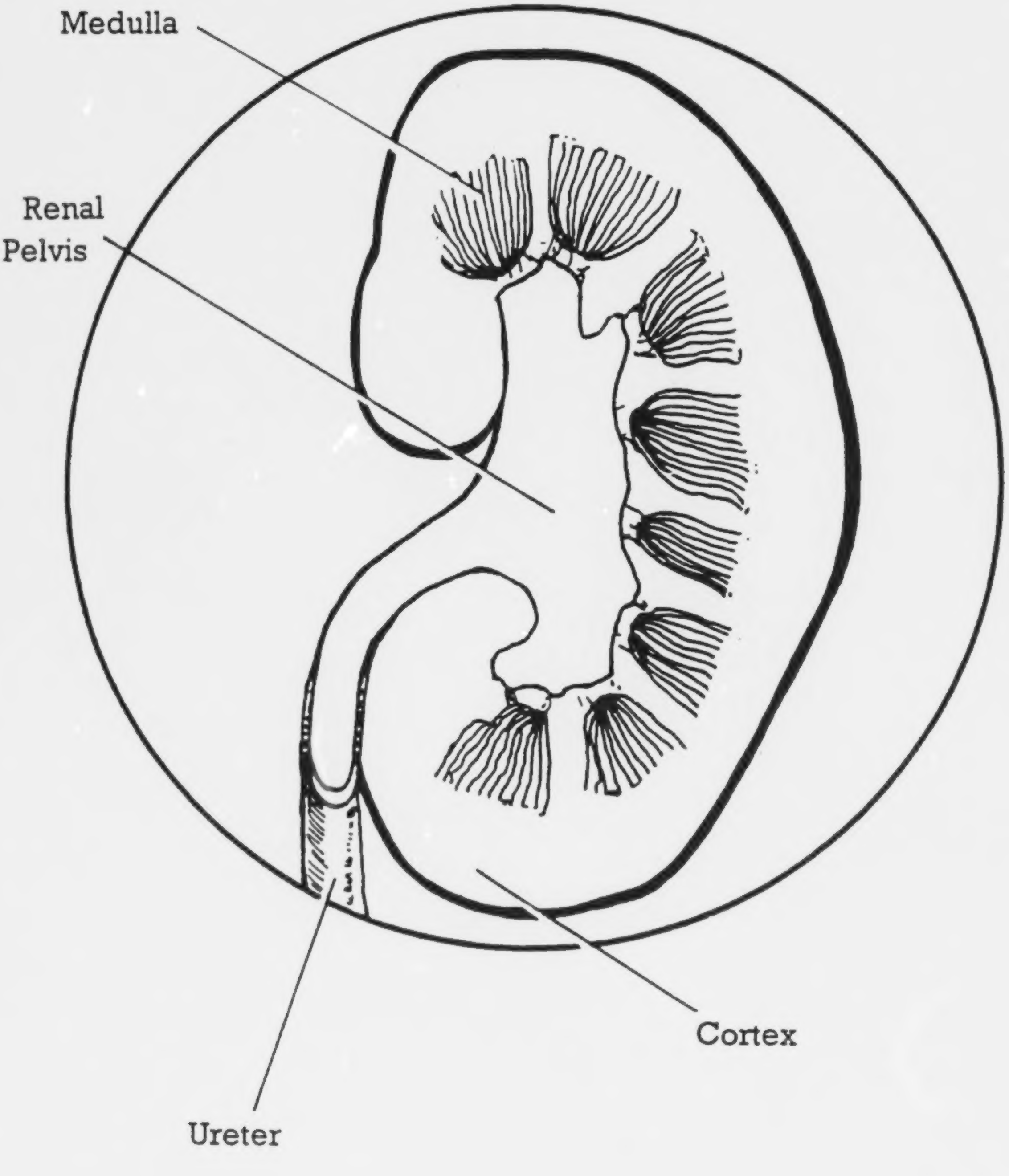
16. Nephritis is defined as: (Circle the letter of the best answer.)

a. Kidney stones.
b. Renal failure.
c. Inflammation of the kidney.
d. Inflammation of the bladder.

THE URINARY SYSTEM

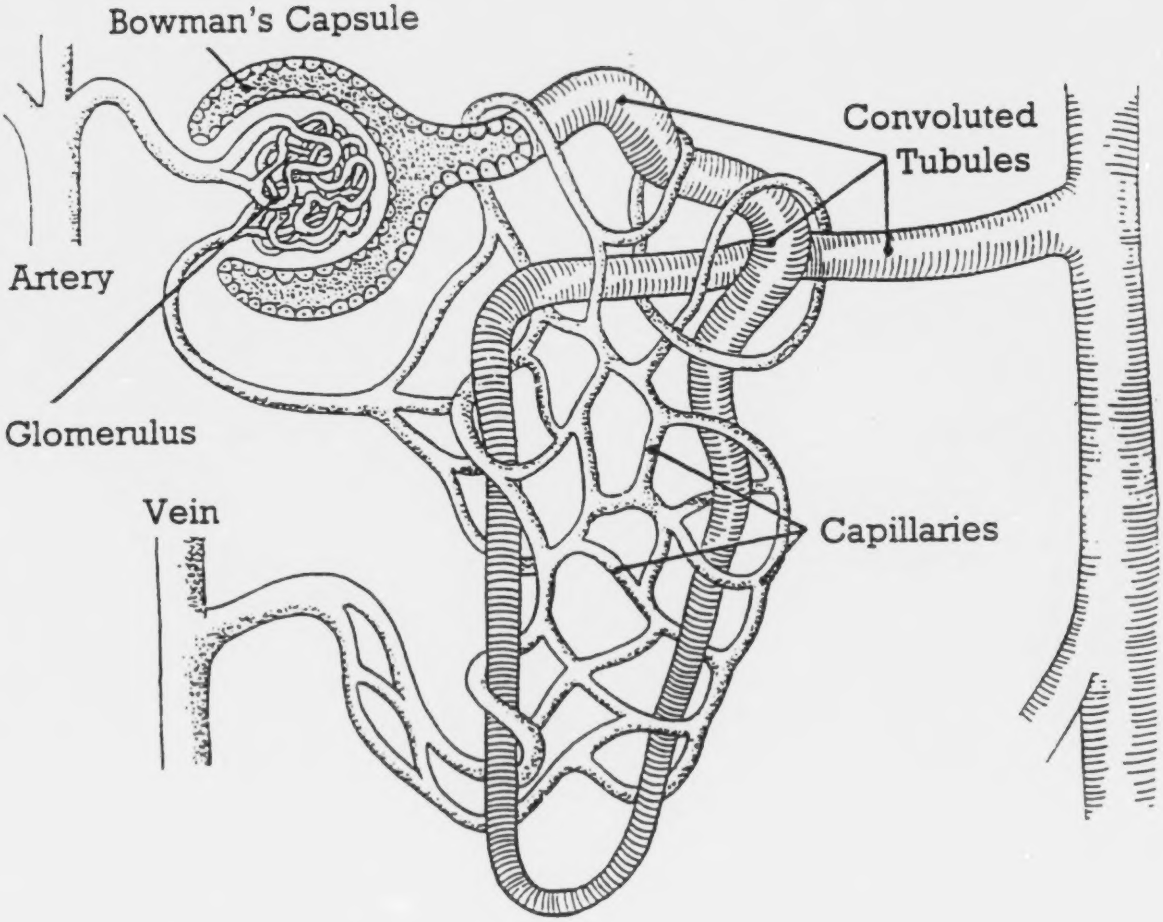

Kidneys
Ureters
Bladder
Urethra

CROSS-SECTION OF A KIDNEY


Medulla
Renal Pelvis
Cortex
Ureter

733

NEPHRON


Bowman's Capsule
Convoluted Tubules
Artery
Glomerulus
Vein
Capillaries

LESSON PLAN: 20

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

SCOPE OF UNIT:

This unit introduces the body as a whole, its organizational structure, and the terminology associated with it. This unit also includes terminology, structure, functions, and conditions, of the following body systems: skin, digestive, musculoskeletal, cardiovascular, respiratory, endocrine, nervous, urinary, and reproductive. Nutrition and vital signs are also included in this unit.

INFORMATION TOPIC: V-20 OR DEMONSTRATION:

REPRODUCTIVE SYSTEM
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match the terms in this lesson with the correct definitions.
2. Label the organs of the male reproductive system on an anatomy diagram.
3. Describe the functions of the male reproductive organs.
4. Label the organs of the female reproductive system on an anatomy diagram.
5. Describe the functions of the female reproductive system.
6. Describe the menstrual cycle.
7. Define menopause.
8. Describe the process of fertilization.
9. Match the disorders and diseases of the reproductive system with the correct description.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Male Reproductive System
2. HO 2: Female Reproductive System

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 20 prior to class and be prepared to discuss the information presented.

REFERENCES:

Anthony, Catherine Parker; Gary A. Thibodeau. *Structure and Function of the Body*, 7th ed.

Fong, Elizabeth; Elvira B. Ferris; Esther G. Skelley. *Body Structures and Functions*, 7th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 5th ed.
Philadelphia, PA: W. B. Saunders Company, 1992.
St. Louis, MO: Time Mirror/Mosby College Publishing, 1984.

Mosby's Medical and Nursing Dictionary, 2nd ed. St. Louis, MO: The C. V. Mosby Company, 1986.

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

INTRODUCTION:

This system is unique. While all other systems are essential for the continuation of one's life, the reproductive system is essential for the continuation of the species. The primary function is to produce a like being.

LESSON PLAN: 20

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

OUTLINE:

I. Terms and Definitions **(II-1)**

A. Amniotic sac - shock absorbing sac filled with fluid which surrounds the embryo

B. Coitus - sexual intercourse

C. Cryptorchidism - undescended testes

D. Ectopic pregnancy - ovum slips into the abdominal cavity and becomes fertilized there

E. Ejaculation - expulsion of semen from the penis

F. Embryo - the stage of development from when the zygote attaches to the uterus (10 days) to the beginning of the fourth month

G. Fetus - the stage of development from the beginning of the fourth month of intrauterine period until birth

H. Gynecologist - specialist in treating female disorders

I. Gynecology - the branch of medicine treating diseases of women

J. Hysterectomy - removal or excision of the uterus

K. Mastectomy - excision of the breast

L. Mastoplasty - plastic surgery on the breast

M. Menarche - beginning of menses

N. Metrorrhagia - uterine bleeding

O. Oophorectomy - excision or surgical removal of an ovary

P. Oophoritis - inflammation of an ovary

Q. Orgasm - the climax of coitus

R. Ovulation - when a mature egg cell is released into the fallopian tube

S. Ovum - female sex cell

T. Placenta - fetal membrane that attaches the fetus to the uterus and exchanges nutrients between the mother and fetus

U. Prepuce - foreskin of male penis

V. Salpingitis - inflammation of the uterine tube

W. Salpingo-oophorectomy - excision of the ovary and the uterine tube

X. Spermatozoon or sperm - male sex cell; spermatozoa is plural form of spermatozoon

Y. Spermicide - an agent that is destructive to spermatozoa

Z. Testosterone - male masculinizing hormone

AA. Vasectomy - surgical removal of a section of the vas deferens; each of the separate ends of the vas deferens are tied off

BB. Zygote - fertilized ovum

II. Male Reproductive System (HO 1) **(II-2)**

A. External genitals

1. Scrotum

a. A skin-covered pouch suspended from the groin region

b. The inside of the scrotum is divided into two sacs by a septum.

c. Each sac contains the testis, epididymis, the lower part of the vas deferens, and the beginning of the spermatic cord.

d. The spermatic cords are cylindrical tubes that cover the vas deferens, blood vessels, nerves, and lymphatics as they pass from the scrotum into the abdominal cavity.

2. Penis

a. Penis is covered with skin.

b. The glans is located at the distal end where the skin is folded to form the foreskin.

c. It expels urine and is the male organ of intercourse (coitus).

B. Internal male structure

1. Testes - gonads of the male **(II-3)**

a. They produce sperm and secrete male sex hormone.

b. The testes are small oval-shaped glands about 1 ½ inches long and 1 inch wide

c. Sperm cells develop in the walls of the seminiferous tubule.

d. Each testis forms millions of sperm every month after puberty.

e. Each testis secretes the male hormone testosterone.

f. The three functions of testosterone are:

   (1) Masculinize,

   (2) Promote and maintain the development of the male accessory organs, and

   (3) Stimulate protein anabolism, which is responsible for the muscular development and strength of the male.

g. Spermatozoa contain all of the characteristics that a baby inherits from the father.

2. Ducts

   a. Epididymis - collects sperm cells and stores them until maturity

   b. Vas deferens - passageway for sperm

   c. Ejaculatory duct - ejaculate sperm

   d. Urethra - passageway for urine and sperm

3. Accessory male glands

   a. Two seminal vesicles

      (1) They secrete the gelatinous fluid part of the semen.

      (2) Each ejaculation has about 1 teaspoon of semen (3 to 5 milliliters). Each milliliter contains about 60 million sperm.

   b. Prostate gland

      (1) Adds alkaline secretion to semen

      (2) Urethra runs through the center of the prostate gland.

   c. Cowper's glands (bulbourethral)

      (1) Located on either side of the urethra just below the prostate gland.

(2) It adds an alkaline secretion to the semen - sperm can survive and remain fertile longer in an alkaline fluid.

III. Female Reproductive System (HO 2) **(II-4)**

A. External genitals - vulva

1. Mons pubis
2. Clitoris
3. Orifice of urethra
4. Labia minora (small lips)
5. Hymen
6. Duct of Bartholin's gland
7. Vagina
8. Labia majora (large lips)

B. Ovaries - main sex gland of the female - release ova and produce hormones **(II-5)**

1. Ovaries are located in the pelvic cavity.
2. Ovarian ducts open into the abdominal cavity and not directly to the ovaries.
3. Ovarian follicles - several thousand microscopic sacs make up each ovary.
    a. Each ovarian follicle contains an immature ovum.
    b. A mature ovum in its sac is called a graafian follicle.
    c. Females usually produce one mature ovum per month.
4. Ovaries secrete the hormones estrogen and progesterone.
5. Ovaries contain two endocrine glands.
    a. Graafian follicles secrete estrogen.
    b. Corpus luteum secretes progesterone and some estrogen.
6. Function of estrogen
    a. Female characteristics

    - b. Stimulates epithelial cells to reproduce themselves; especially in the lining of the uterus

  - 7. Function of progesterone

    - a. Stimulates secretion by epithelial cells

    - b. Decreases contractions by uterine muscle during pregnancy

- C. Ducts

  - 1. Fallopian tubes - guide ovum to uterus

    - a. Tubes are about 4 inches long.

    - b. Outer edge curves over the top edge of the ovaries.

    - c. They open into the abdominal cavity.

    - d. Fimbriae (finger-like folds located over the ovaries) help propel the ova down the oviduct into the uterus.

- D. Uterus - receives fertilized ovum and provides housing and nourishment for fetus

  - 1. It is pear shaped and about the size of a pear.

  - 2. It is hollow and has a thick wall.

  - 3. The uterine cavity expands during pregnancy.

  - 4. It has three parts:

    - a. Fundus - bulging, upper part

    - b. Body - middle part

    - c. Cervix - lower, narrow portion that extends into the vagina

  - 5. Layers of the uterine wall

    - a. Serous - outer wall

    - b. Myometrium - middle layer; it is thick, smooth, and muscular

    - c. Endometrium - inner mucous layer

  - 6. Function

    - a. Menstruation

    - b. Pregnancy

        c. Labor

E. Vagina - serves as female organ of intercourse and the birth canal

    1. Extends from the cervix to the vulva

    2. Functions

        a. Receives the sperm

        b. Stretches during childbirth to allow delivery of infant

F. Breasts - provide milk for newborn

    1. Each breast consists of many lobes arranged in a circular formation.

    2. Lobes are surrounded by tiny ducts.

    3. Areola is the dark area that surrounds the nipple. Ducts open into this area.

    4. Milk secretion is stimulated by prolactin from the anterior lobe of the pituitary gland.

IV. Menstrual Cycle - Usually a 28-day Cycle

A. Starts at puberty - average age is 12 to 15 years but can start anywhere between age nine and eighteen years of age. **(II-6)**

B. Controlled by hormones from the pituitary gland and ovaries.

C. Stages

    1. Follicle - last for 10 days **(II-7)**

        a. Anterior lobe of pituitary gland secretes follicle-stimulating hormone.

        b. It is carried through the blood stream to the ovaries.

        c. When the follicle-stimulating hormone reaches the ovary, it causes one follicle to mature, grow in size, and an egg cell to grow in it.

        d. The follicle fills with estrogen.

        e. The estrogen causes the endometrium to become thicker and the uterus to be ready for implantation of an embryo.

    2. Ovulation

        a. The estrogen in the blood stream reaches a high level.

        b. The pituitary gland stops producing the follicle-stimulating secretion.

c. The luteinizing hormone is secreted by the pituitary gland.

d. At this time, the female has three hormones in the blood stream:

(1) Estrogen,

(2) Follicle-stimulating hormone, and

(3) Luteinizing hormone,

e. These three hormones stimulate the mature follicle to break about the 14th day and ovulation occurs. **(II-8)**

3. Corpus luteum stage - lasts about 14 days

a. Luteinizing hormone causes corpus luteum to form.

b. Corpus luteum secretes progesterone.

c. Progesterone causes the endometrium to thicken.

4. Menstruation stage - last approximately 4 days

a. Menstruation occurs about the 28th day.

b. If the embryo is not implanted in the uterus, progesterone inhibits further luteinizing hormone secretion.

c. The corpus luteum breaks down.

d. The endometrium becomes thinner and breaks down.

e. A small amount of blood from the ruptured capillaries, extra layers of the endometrium, and the unfertilized egg are discharged from the body as menstrual flow.

V. Menopause

A. The menstrual cycle ceases. **(II-9)**

B. Menopause occurs gradually about 45 to 50 years of age but can occur as early as 35 years of age.

VI. Reproductive Process

A. Fertilization **(II-10)**

1. Fertilization occurs in the outer 1/3 of the oviduct. Once fertilized, the ovum becomes a zygote.

2. The zygote divides, and in approximately 3 days, a solid mass of cells forms.

3. The zygote continues to divide as it travels to the uterus. The zygote is now called an embryo.
4. In 10 days, it is implanted in the uterus.
5. Next, the amniotic fluid and placenta develop.
6. The organ systems begin to grow.
7. The fifth week the heart is beating.
8. All organ systems are formed by the beginning of the fourth month. The embryo is now called a fetus.
9. Length of pregnancy is 280 days.

B. Normal pregnancy

1. Signs and symptoms
2. Prenatal care
3. Preparation for parenthood

C. Phenomena of labor

1. Signs
2. Three stages
    a. First stage of labor
    b. Delivery of newborn
    c. Expulsion of placenta

D. Postpartum period

VII. Disorders and Diseases of the Reproductive System **(II-11)**

A. Pruritus - itching of vulva and anus

B. Benign prostatic hypertrophy - non-malignant enlargement of the prostate gland

C. Prostatitis - inflammation of the prostate gland

D. Cancer of the prostate - malignant tumor

E. Dysmenorrhea - painful menstruation (cramps)

F. Amenorrhea - absence of menstruation

G. Menorrhagia - excessive bleeding during menstruation

H. Pelvic infection (PID) - infections of the pelvic cavity caused by gonorrhea, streptococcus, or staphylococcus

I. Breast tumors - may be malignant or benign

J. Vaginitis - inflammation of the vagina

K. Cystocele - the urinary bladder protrudes into the vagina

L. Fibroid tumors - benign tumors of the uterus

M. Hydrocele - accumulation of fluid in the scrotum

N. Varicocele - veins within the scrotum enlarge

O. STD - sexually transmitted diseases (examples follow)

  1. Gonorrhea - caused by the gonococcus bacteria; contagious

  2. Herpes simplex genitalis - viral infection; causes lesions on the male and female genitalis

  3. Syphilis - caused by the spirochete, Treponema pallidum; it can involve any organ or tissue of the body

P. Anorchism - congenital absence of testes

Q. Orchitis - inflammation of the testis

VIII. Summary and Conclusion

A. Terms and definitions

B. Male reproductive system

C. Female reproductive system

D. Menstrual cycle

E. Menopause

F. Reproductive process

G. Disorders and diseases of the reproductive system

This lesson has covered the terms and definitions related to the reproductive system. You have identified the male and female reproductive organs, their structure and function. We have briefly discussed the disorders and diseases of the reproductive system. The next unit will be on the stages of life.

LESSON PLAN: 20

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V : ANATOMY AND PHYSIOLOGY

INTERACTION ITEMS:

1. What are the definitions of terms found in this lesson?
2. Where on the diagram of the male reproductive organs are the vas deferens, seminal vesicle, prostate, testis, penis, and epididymis located?
3. What are the functions of the testes, ducts, seminal vesicles, prostate gland and Cowper's gland?
4. Where on the anatomy diagram are the female reproductive organs located?
5. What are the functions of the ovaries, fallopian tubes, uterus, vagina, and breasts?
6. What age does the menstrual cycle begin?
7. How long does the follicle stage of menstruation last?
8. What day of the menstrual cycle does ovulation occur?
9. What is menopause?
10. How does fertilization take place?
11. What is the correct description of diseases and disorders presented in this lesson?

CLASSROOM, LABORATORY, SHOP, OR OTHER ACTIVITIES:

1. Use anatomical model(s) and discuss the organs and their function.
2. Invite guest speaker from Missouri Department of Health to discuss breast self-exam.
3. Explain the menstrual cycle.

ANSWERS TO EVALUATION ITEMS:

1. c
2. g
3. a
4. f
5. b
6. d

7. a. Vas deferens
   b. Seminal vesicle
   c. Prostate
   d. Testis (gonad)
   e. Penis
   f. Epididymis

8. a

9. a. Fallopian tube
   b. Ovary
   c. Uterus
   d. Vagina

10. d
11. b
12. c
13. c
14. c
15. d
16. f
17. a
18. b

19. a. Ovum
    b. Zygote
    c. Embryo
    d. Fetus

LESSON PLAN: 20

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT V: ANATOMY AND PHYSIOLOGY

EVALUATION ITEMS:

Match the terms in Column I with the correct definitions in Column II.

Column I

____ 1. Spermatozoa

____ 2. Ovum

____ 3. Menarche

____ 4. Zygote

____ 5. Embryo

____ 6. Fetus

Column II

a. Beginning of menses

b. The stage of development from 10 days to the beginning of the fourth month

c. Male sex cell

d. The stage from the beginning of the fourth month of intrauterine period until birth

e. The climax of coitus

f. Fertilized ovum

g. Female sex cell

7. Label the organs of the male reproductive system.

   a.

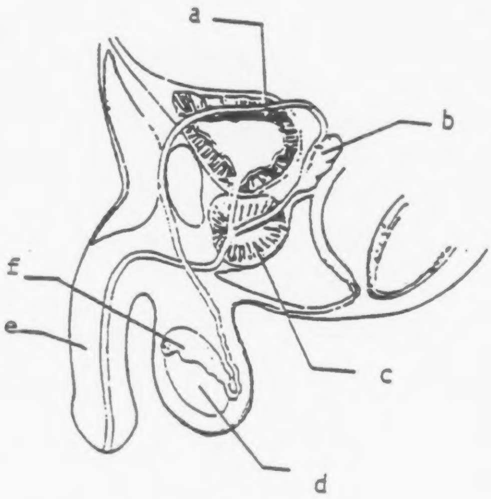
   b.

   c.

   d.

   e.

   f.



8. The functions of the testes are to: (Circle the letter of the best answer.)

   a. Produce sperm and secrete male sex hormone.
   b. Collect and store sperm cells until maturity.
   c. Secrete the gelatinous fluid part of semen.
   d. Add alkaline secretion to semen.

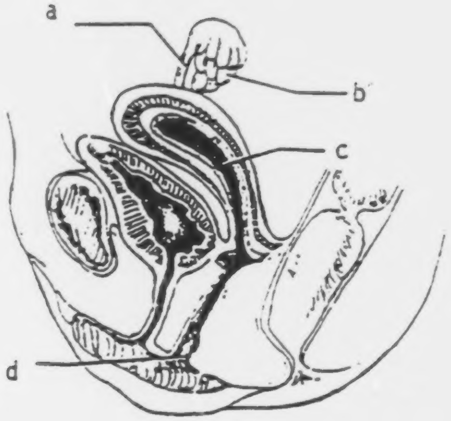
9. Label organs of the female reproductive system.

a.

b.

c.

d.



10. The function of the uterus is to: (Circle the letter of the best answer.)

    a. Release the female sex cell and produce hormones.
    b. Guide the ovum.
    c. Serve as female organ of intercourse and birth canal.
    d. Receive fertilized ovum and provide housing and nourishment for the fetus.

11. Which of the following statements are true concerning the menstrual cycle? (Circle the letter of the best answer.)

    a. The cycle is 30 days in length.
    b. Average age of onset is 12 to 15 years of age.
    c. The follicle stage last for 20 days.
    d. Ovulation occurs about the 5th.

12. Menopause is defined as: (Circle the letter of the best answer.)

    a. The time when old age begins.
    b. The beginning of the menstrual cycle.
    c. The time menstrual cycle ceases.
    d. A condition that occurs suddenly.

13. The heart of the embryo begins to beat at the: (Circle the letter of the best answer.)

    a. 1st week.
    b. 10th day.
    c. 5th week.
    d. 3rd month.

Match the disorder or disease of the reproductive system in Column I with the correct definition in Column II.

	Column I		Column II
____ 14.	Orchitis	a.	Itching of vulva and anus
____ 15.	Dysmenorrhea	b.	Excessive bleeding during menstruation
____ 16.	Fibroid tumor	c.	Inflammation of the testis
____ 17.	Pruritus	d.	Painful menstruation
____ 18.	Menorrhagia	e.	Absence of menstruation
		f.	Benign tumors of the uterus

19. Place the items in the following list in the correct order of the growth and development process of normal pregnancy.

Ovum
Embryo
Fetus
Zygote

a. ______________________

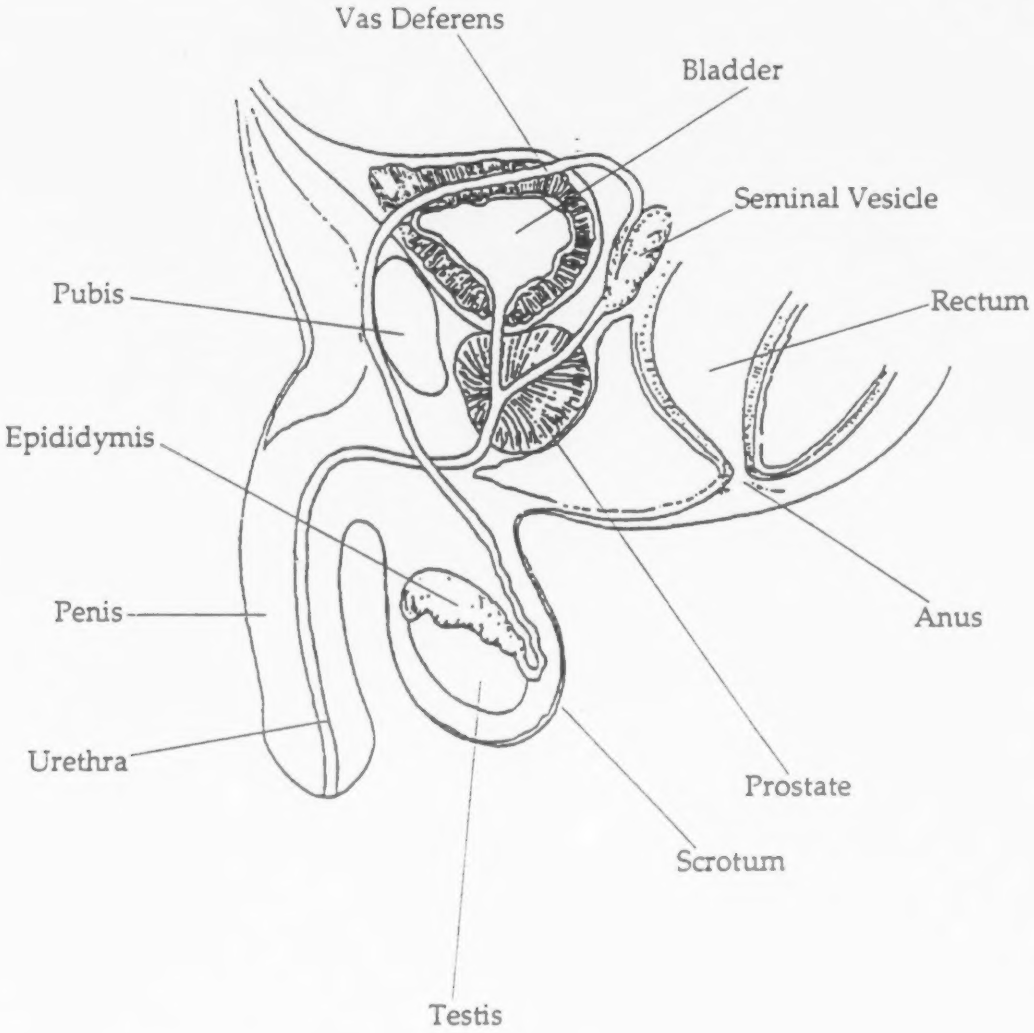
b. ______________________

c. ______________________

d. ______________________

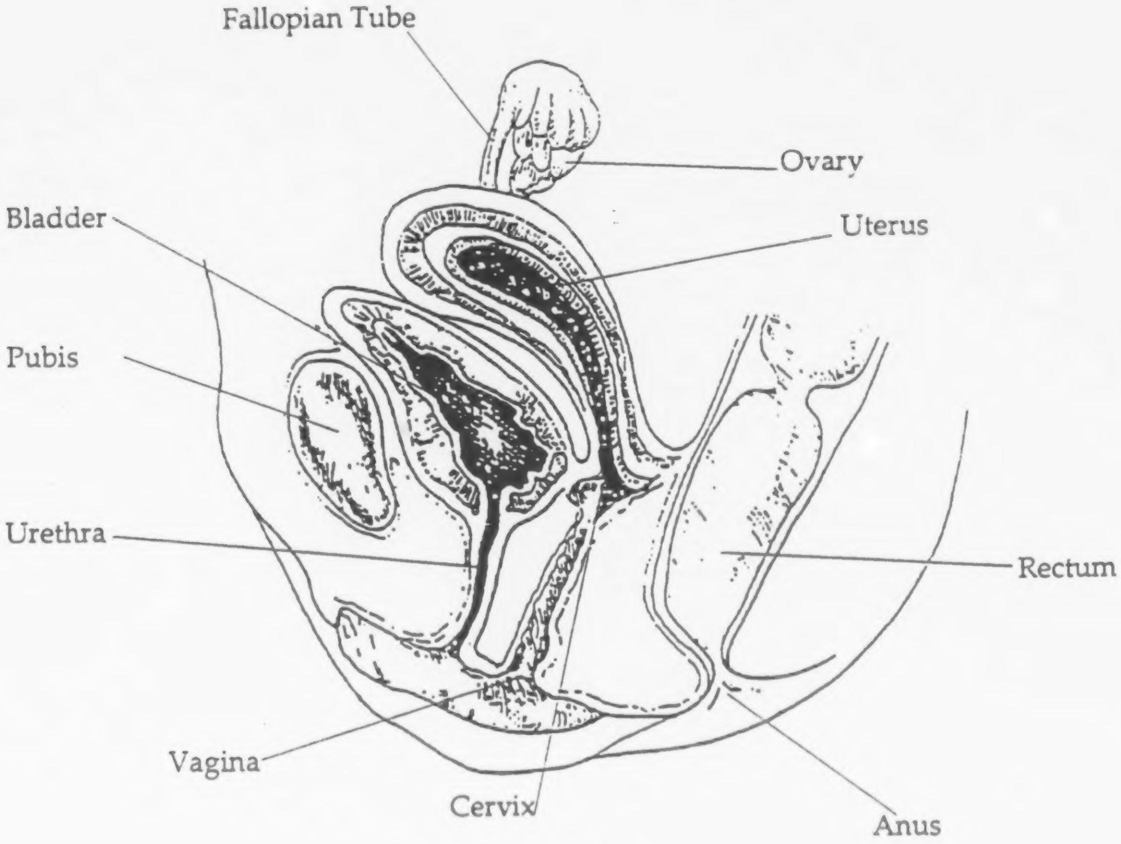
HO 1

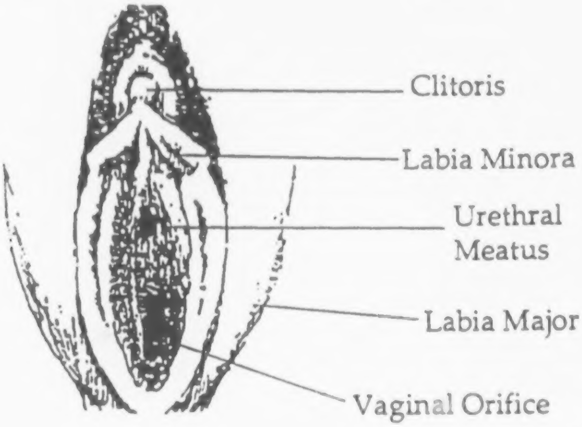
MALE REPRODUCTIVE SYSTEM


Vas Deferens
Bladder
Seminal Vesicle
Rectum
Pubis
Epididymis
Penis
Anus
Urethra
Prostate
Scrotum
Testis

HO 2

FEMALE REPRODUCTIVE SYSTEM


Fallopian Tube
Ovary
Bladder
Uterus
Pubis
Urethra
Rectum
Vagina
Cervix
Anus


Clitoris
Labia Minora
Urethral
Meatus
Labia Major
Vaginal Orifice

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

SCOPE OF UNIT:

This unit explores the life stages of human beings. Topics on basic human needs, the aging process, Alzheimer's Disease, and death and dying are included. Correct approaches in providing care for mentally confused clients are a part of this unit as well.

INFORMATION TOPIC: VI-1 OR DEMONSTRATION:

BASIC HUMAN NEEDS
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Identify how the health care assistant can meet the client's basic physical needs.
2. Identify how the health care assistant can meet the client's safety and security needs.
3. Identify how the health care assistant can meet the client's need for love and belonging.
4. Identify how the health care assistant can meet the client's need for self-esteem.
5. Identify how the health care assistant can assist the client in reaching self-actualization.
6. Identify various approaches in satisfying the basic human needs of the client.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Maslow's Hierarchy of Needs
2. HO 2: Spiritual Care
3. Audiovisuals available from the Missouri Division of Aging Film Library
   a. *Mildred: The First 90 Years*, video (TF #183), 29 min.
   b. *Depression and the Elderly - Diagnosis and Treatment*, video (TF #231), 15 min.
4. Television and VCR
5. Tape player

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 1 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991.

Lefrancois, Guy R. *The Lifespan*. 4th ed. Belmont, CA: Wadsworth Publishing Company, 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990.

INTRODUCTION:

Everyone has emotional needs. We must keep in mind that we are not just taking care of the physical needs of the client. Those needs sometimes seem more urgent, but that is not a reason to ignore the emotional needs which include psychological and social needs. A person goes through different stages of life learning to master new tasks so he/she can grow and develop.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

OUTLINE:

NOTE: The health care assistant helps clients meet their basic human needs according to Maslow's Hierarchy of Needs. (HOs 1 & 2)

I. Basic Physical Needs **(II-1)**

  A. Food and fluids - providing adequate diet and fluids

  B. Clothing and shelter - helping to stay warm or cool

  C. Activity and rest - walk with client, ROM, assist to bed, comfortable position

  D. Elimination - able to urinate or defecate

  E. Sexual expression - ensure privacy rights

II. Safety and Security Needs **(II-2)**

  A. Health - good physical health; prevent illness

  B. Protection from injury - side rails, call light close

  C. Ability to help self - promote independence

  D. Own territory or space - allow privacy; even children need their own space and belongings. Client may personalize room with own furniture and personal belongings.

III. Love and Belonging Needs **(II-3)**

  A. Sustaining relationships - encourage visits by friends; allow client to talk about the past

  B. Having someone who cares and to care for - this may be up to the health care assistant; listen to tales of the past, family, experiences; show interest in the client

  C. Meeting spiritual needs - assist to church services (HO 2)

IV. Self-esteem **(II-4)**

  A. Receiving respect and recognition (sense of identity) - call client by preferred name; respect privacy

B. Feeling important - praise client for accomplishments; acknowledge client at all times; respect privacy

V. Self-Actualization **(II-5)**

A. Satisfying use of time - encourage participation in activities

B. Having direction - allow him/her to talk about future, feelings about death

C. Venting feelings without shame - allow him/her to talk

D. Making decisions - allow client to make any choice possible, may be as simple as what he/she is going to wear today

VI. Approaches in Satisfying Basic Human Needs **(II-6)**

A. Accept the client and his/her personality as is. Try to see the positive things about this person.

B. We may not approve of client's action, but we let him/her know that we like client for himself/herself.

C. Make client as comfortable as possible -- both physically and mentally.

D. The client must be treated in the same manner by all who work with him/her. One person should not grant special favors and another person forbid them utilization of care plans helps provide this consistency.

E. The client needs reassurance that he/she is a functioning individual.

F. Client may need someone to talk to about his/her fears, worries, and anxieties. Be a good listener.

G. Respect client's dignity; never treat an adult as a child. Never treat a child as a non-person. Do not use such words as diapers, bibs, etc. when working with adults.

H. The client has a right to understand what is happening to him/her. Give adults thorough explanations before a procedure. Give children a simple brief explanation.

I. Never criticize or blame a client for not being able to perform certain tasks.

J. Be pleasant and friendly at all times. Leave your troubles at home so that you can smile often.

K. The client may be very sweet and agreeable to work with or he/she may be irritable, complain about anything and everything, use abusive language, or strike out at you. The client may take out his/her frustrations on the nearest person and it may be you. Accept the client quietly; allow him/her to "sound off."

L. Do not argue with a client.

M. The irritable client is often avoided and neglected by the health care assistant; if this is the case, he/she will only become more irritable.

N. It is easy to become emotionally involved with your clients. It is easy to love someone who is young and needs you or who is old and needs you! Meet their needs while you are with them. Do the best that you can as you care for them.

O. Due to the absence of parents, or the loss of family or friends, the client may lack human contact and closeness. Don't forget to smile, give a hug, and/or squeeze a hand. They need our affection.

VII. Summary and Conclusion

A. Basic physical needs

B. Safety and security needs

C. Love and belonging needs

D. Self-esteem

E. Self-actualization

F. Approaches in satisfying basic human needs

Always keep in mind that the client may be a totally dependent infant or an adult with a lifetime of knowledge and experience. Infants will rely on you to meet their basic needs. Adults need to draw upon their experience to thrive. They need to continue to make decisions and participate in their own care. This will enhance self-esteem and feelings of independence. Infants and young children have the same needs as adults. They may not have years of experience to call upon, but they too need to be allowed to make decisions and participate in their own care to the extent of their ability. Be alert for clients whose behavior indicates their personal needs are not being met. The health care assistant can play an important role in assisting a client meet his or her needs. The next lesson is on the aging process.

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

INTERACTION ITEMS:

1. What are five ways in which the health care assistant can meet the client's basic physical needs?
2. What are the four safety and security needs and how can they be met?
3. How can you, as a health care assistant, meet the client's need for love?
4. How can the health care assistant meet the client's need for self-esteem?
5. What are the four self-actualization needs and how can they be met?
6. What are three nursing approaches the assistant can use when caring for a client?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Divide the class into three groups. Assign one or two behaviors listed below. Have students role-play nursing approaches used in each situation with a young child as a client. Repeat the activity with an elderly person as the client.
   - A. Dependent client
   - B. Overly suspicious client
   - C. Jealous client
   - D. Depressed client
   - E. Angry/demanding client
   - F. Withdrawn client
   - G. Confused and disoriented client
2. View audiovisuals.

ANSWERS TO EVALUATION ITEMS:

1. d
2. a
3. e
4. b
5. c
6. b
7. d
8. a
9. a
10. b
11. a
12. d
13. c

LESSON PLAN: 1

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

EVALUATION ITEMS:

Match the basic human need in Column I with the correct way the health care assistant can help meet that need in Column II by writing the letter in the blank.

		Column I		Column II
___	1.	Self-esteem	a.	Provide adequate diet and fluids
___	2.	Basic physical needs	b.	Allow clients to make choices, encourage activities
___	3.	Love and belonging	c.	Provide side rails, call light
___	4.	Self-actualization	d.	Call client by name, respect privacy
___	5.	Safety and security	e.	Encourage family and friends to visit; show a caring attitude

Circle the letter that corresponds to the best answer.

6. When caring for children, the health care assistant should:

    a. Discourage territory and space needs.
    b. Provide territory and space needs.
    c. Allow the child to make all decisions.
    d. Do not allow the child to make any decisions.

7. If the client is around many people, as in a long-term care facility, it is most likely that:

    a. He or she always feels needed and loved.
    b. He or she does not have territory or belonging needs.
    c. He or she has friends that will take care of all his or her needs.
    d. He or she has needs to be met, just as everyone does.

8. In helping clients to reach their full potential, the assistant should:

    a. Allow the client to vent feelings without shame.
    b. Discourage the expression of feelings.
    c. Discourage decision-making.
    d. Discourage too many visits from friends and family.

9. Before starting a procedure on a client, the assistant should:

   a. Explain to the procedure to the client.
   b. Distract the client so that they do not know what is happening.
   c. Tell the client that if he or she does not cooperate, he or she cannot have dinner.
   d. Ask the client to take notes about the procedure, so that it does not have to be explained in the future.

10. When irritable clients are ignored, it is most likely that:

   a. They will become less irritable.
   b. They will become more irritable.
   c. They will become less dependent.
   d. They will become more content.

11. A client's loss of independence can lead to:

   a. A poor self-image.
   b. A good self-image.
   c. Complete happiness.
   d. Complete satisfaction.

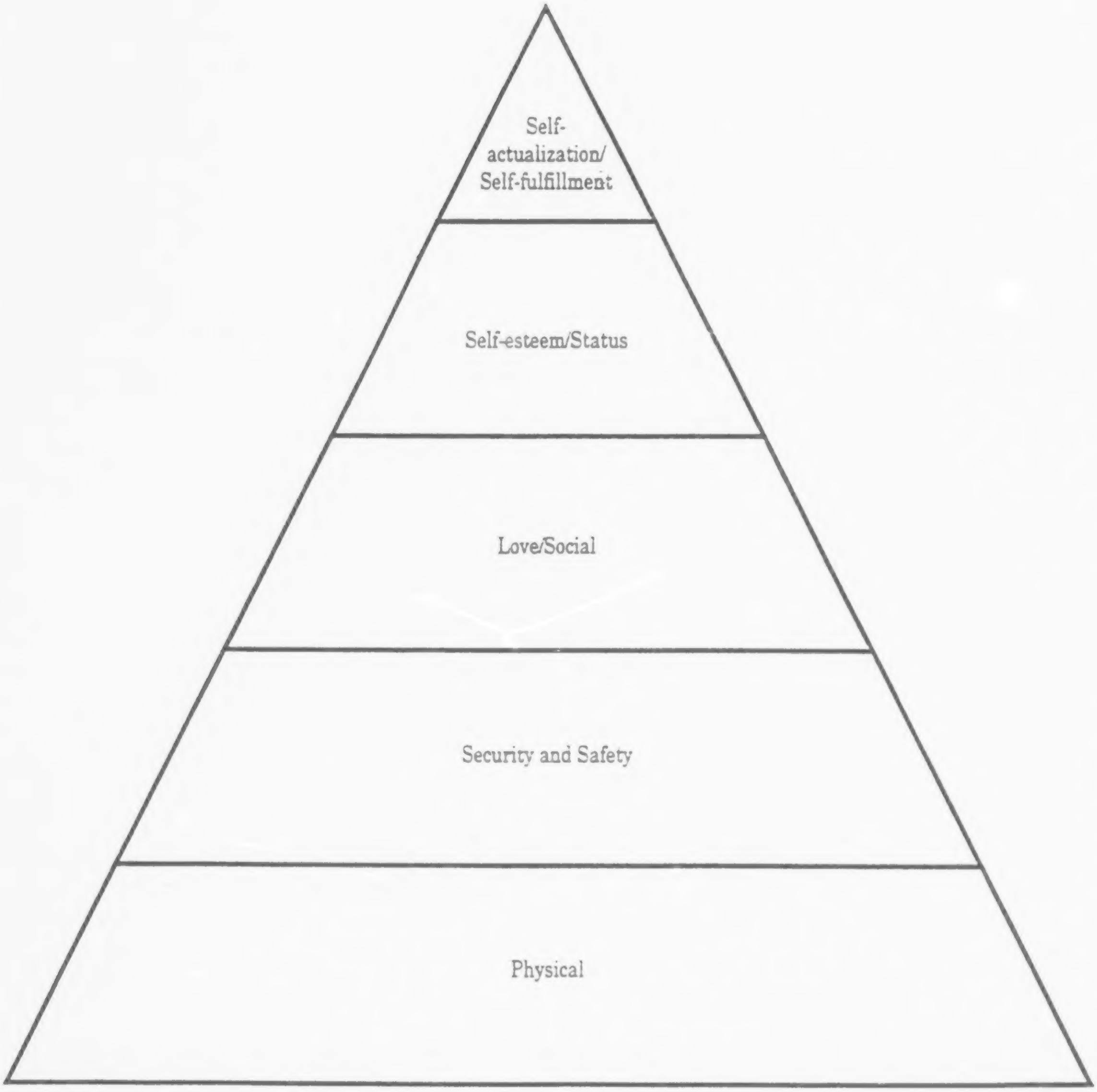
12. When the client wants to talk to the assistant about his or her fears, worries, and anxieties, the assistant should:

   a. Tell the client's friends about his or her worries.
   b. Discourage the client from talking.
   c. Give lots of good advice.
   d. Be a good listener.

13. In helping a client to build his or her self-esteem, the assistant can:

   a. Protect the client from injury.
   b. Provide the client with clothing.
   c. Praise the client for accomplishments.
   d. Provide the client with food and fluids.

MASLOW'S HIERARCHY OF NEEDS


Self-
actualization/
Self-fulfillment
Self-esteem/Status
Love/Social
Security and Safety
Physical

Maslow's Hierarchy of Needs

SPIRITUAL CARE

Meeting the spiritual needs of clients in the health care facility is just as much a part of the client's life as is meeting the nutritional, hydration, sleep, safety, etc., needs of each client in the facility.

Spiritual care offers a sense of hope by helping clients find meaning and purpose in life for their physical, mental, and emotional problems. That hope may affect whether a client lives or gives up on life and dies.

Spiritual care is concerned with the total person. The interdependence of mind, body, and spirit is well known and medically acknowledged.

Our goal in giving spiritual care is to:

1. Give peace of mind to the client.
2. Build emotional stability which in turn will help heal the physical part of the body.

Staff can be a healing resource for the client. In order to enable the client to heal in these ways the health care assistant should:

1. Have a trusting relationship with the client (accept the client as he/she is).
2. Show dignity, respect, and value for the client as a person no matter what his/her physical or mental condition.

The need for spiritual care is important to all humans and especially so for many elderly. By giving the client hope, faith, and confidence, the health care assistant gives the client the ability to grow in the face of illness and despair. Even though the client may have no specific religious faith he/she can have a sense of spirituality. Spirituality means having a meaning for being.

The spiritual needs of the client may be met by doing some of the following:

1. Treating the client with respect.
2. Talking with and listening to the client.
3. Assisting a client to attend worship services.
4. Assisting in arranging for a memorial service for a client's friend in the facility who has died.
5. Assisting a client to attend a religious study group.
6. Being a supportive presence and showing empathy for the client.

As a member of the health care team, the health care assistant shares in helping the client reach the goals in the health care plan, utilizing the approaches outlined in the care plan. Meeting the spiritual needs of the client gives the client peace and hope.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

SCOPE OF UNIT:

This unit explores the life stages of human beings. Topics on basic human needs, the aging process, Alzheimer's Disease, and death and dying are included. Correct approaches in providing care for mentally confused clients are a part of this unit as well.

INFORMATION TOPIC: VI-2 OR DEMONSTRATION:

INFANCY - LATE CHILDHOOD LIFE STAGES

(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Define terms related to life stages.
2. Identify the life stages.
3. Identify at least two physical changes that occur in infancy.
4. Identify at least two mental changes that occur in infancy.
5. Identify at least two social changes that occur in infancy.
6. Apply knowledge of the aging process to care for clients in infancy.
7. Identify at least two physical changes that occur in early childhood.
8. Identify at least two mental changes that occur in early childhood.
9. Identify at least two social changes that occur in early childhood.
10. Apply knowledge of the aging process to care for clients in early childhood.
11. Identify at least two physical changes that occur in late childhood.
12. Identify at least two mental changes that occur in late childhood.
13. Identify at least two social changes that occur in late childhood.
14. Apply knowledge of the aging process to care for clients in late childhood.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Average Physical, Mental, and Social Development in Infancy
2. HO 2: Average Physical, Mental, and Social Development in Early Childhood
3. Chalk and blackboard
4. Skeletorso

INFORMATION ASSIGNMENT:

Read Lesson Plan 2 prior to class and be prepared to discuss information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991.

Lefrancois, Guy R. *The Lifespan*. 4th ed. Belmont, CA: Wadsworth Publishing Company, 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990.

INTRODUCTION:

Aging begins at birth. The process of aging has been studied extensively to discover why the body undergoes predictable changes at various ages. The life cycle is clearly distinguishable by individual needs at various age plateaus called life stages. Assuming that all factors affecting growth and development are optimal, knowledge of the changes occurring at various life stages can be used to guide health services assistants in their planning and delivery of care.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

OUTLINE:

I. Terms and Definitions Relating to Life Stages **(II-1)**

   A. Mental changes - sensory and emotional changes that occur as part of a normal process of growth and development of the mind, assuming that all conditions are normal. Mental changes includes the development of the mind and includes learning, problem solving, making judgements, and dealing with life's situations. Emotional changes refer to feelings dealing with love, hate, joy, and fear.

   B. Physical changes - physical changes that occur during the normal process of growth and development assuming that all conditions are normal.

   C. Social changes - the preferences that occur to fulfill the individual need to socialize. Social changes refer to interactions and relationships with others.

II. Life Stages: Human growth and development begins at birth and ends with death. Growth and development can be grouped into stages according to the needs of individuals at each stage. Each person passes through stages measured by physical, mental, and social development. Assuming that all factors affecting growth and development are normal, each stage is predictable. Life stages are classified into seven categories. **(II-2)**

   A. Infancy (birth to 1 year)

   B. Early childhood (1 year to 6 years)

   C. Late childhood (6 to 12 years)

   D. Adolescence (12 to 20 years)

   E. Early adulthood (20 to 40 years)

   F. Middle adulthood (40 to 65 years)

   G. Late adulthood (65 to -- years)

III. Physical Changes in Infancy (birth to 1 year) - the most dramatic and rapid changes in growth and development occur in this life stage. **(II-3)**

   A. Average birth weight is 6 to 8 pounds.

      1. Weight will vary

2. Some mothers have larger or heavier babies than others.

B. Weight will average between 25 to 30 pounds at 12 months.

C. Average birth length is 19 to 21 inches.

D. Length will average between 25 to 30 inches at 12 months.

E. Vision is usually fuzzy and blurred at birth.

1. A normal infant's vision is close to an adult's by 6 months.

2. Color vision is developed between the ages of 2 to 4 months.

F. Hearing at birth is slightly less than an adult's.

G. Infants are born with sensitivity to odors, tastes, and touch.

H. Baby (deciduous) teeth begin to erupt around 3 months.

I. Infants can usually turn from abdomen to back around 3 months.

J. At 3 months an infant can sit momentarily

K. Infants can perform purposeful movement by 8 to 12 months.

1. Can grasp an object and put it to the mouth to suck.

2. Begin to recognize familiar things and people

L. Begin to crawl at about 9 months

M. Can stand supported at 9 months

N. Take first step around 1 year

O. Say some words like "mama" or "papa" around 9 to 12 months

P. Inspect hands and reach for things by 4 months.

Q. Can lift a cup by the handle and will look for fallen object by 6 months

IV. Mental changes Infancy - infancy is the "dependency stage," totally dependent upon others. (HO 1)

A. Infant behaviors are simple reflexes at birth. **(II-4)**

1. Sucking

2. Grasping

3. Stepping

B. Emotional development is observed by 4 to 6 months.

1. Distress

2. Anger

3. Fear

C. Infants respond to verbal requests, even those not accompanied by gesture, at 9 months.

D. Fear may occur from loud noises or sudden loss of support.

V. Social Changes in Infancy

A. Little to no social interaction occurs at birth. Social development progresses from self-centeredness to gradual recognition of others. This usually occurs by the age of 4 months. First human relationship occurs with infant reacting with smiles and noises

1. A deliberate smile in response to a voice begins around 3 weeks of age. **(II-5)**

2. A laugh occurs by the age of 4 months.

3. Fear of strangers does not occur before the age of 6 months. Infants will socialize freely with familiar people by the age of 12 months.

4. Infants appear to become equally attached to their mothers and fathers.

VI. Care of Clients in Infancy

A. Safety is always a concern when caring for infants. **(II-6)**

1. Keep crib rails up; infants can turn over at 3 months.

2. Toys must not have detachable parts that can be placed in the mouth and swallowed.

3. At around twelve months, monitor to prevent falls.

B. Good support of the infant's body will help infant feel secure.

C. Protect infants from loud noises, as this causes fear.

D. Speak in a soft, gentle voice to convey a sense of caring.

E. Gentle touching is a way to convey a sense of caring.

VII. Physical changes in Early Childhood (1 to 6 years) (HO 2)

A. Physical growth gradually slows down after infancy.

1. Children are unable to control voluntary muscles until around 2 years. This is why potty training is usually not successful until between 2 to 3 years. **(II-7)**

2. They can pick up objects, stack blocks, and do other tasks that require motor coordination.

3. Motor skills are improved around 3 years.

a. Can walk and run

b. Put words together

4. The digestive tract is mature enough to digest most adult food.

VIII. Mental Changes in Early Childhood

A. Toddlers become increasingly independent.

B. They are interested in exploring their surroundings.

C. They are able to count and solve simple puzzles.

D. Language is rapidly developing.

1. They are able to put together multiple-word sentences around 2 - 2½ years.

2. Four-year olds are continuously asking "why?"

3. By age 6 memory has developed, and the child is ready to learn to read and write.

E. Two-year olds have short attention spans, but have a lot of interests.

F. They become less dependent on mother and more attached to father around age of 3. **(II-8)**

G. Active imagination is evident between the ages of 3 to 5.

H. They begin to develop self-awareness and become curious about their own sex organs.

IX. Social Changes in Early Childhood

A. Social development expands from that of the self-centered toddler.

1. Younger children fear separation from parents.

        2. They become more cooperative and sociable between 3 to 5 years old.

    B. The first part of this life stage is known as the "terrible twos."

        1. Toddlers do not play well with other children.

        2. They indulge in social parallel play (side-by-side).

            a. This is the "no" and "mine" stage.

            b. They have no control over their emotions or their expressions. **(II-9)**

    C. Friends of the same sex are important to older children (6-year olds). Gender roles are beginning to become apparent in their play.

    D. Older children learn to put "self" aside and become more agreeable and social.

    E. They begin to understand right and wrong.

    F. Basic needs of this life stage still include food, rest, shelter, protection, love, and security. Their security needs in their daily lives are provided by:

        1. Established routines

        2. Maintaining order

        3. Remaining consistent

X. Care of Clients in Early Childhood

    A. Provide safety.

        1. Safeguard walking toddlers until muscle coordination allows them to ambulate safely.

        2. Make sure harmful substances and chemicals are not within the toddler's reach.

        3. Protect against burns from stoves, liquid spills, etc.

        4. Remove all items that can be placed in a toddler's mouth and that they can choke on

        5. Make reasonable demands according to the child's ability to comply. **(II-10)**

            a. Set routines.

            b. Have simple rules to follow.

6. Provide blocks, puzzles, or counting games for independent play or parallel play with other toddlers.

7. Provide group play for children between the ages 3 and 5.

8. Supervise play until child is in the later part of this life stage (6 years old).

9. Monitor potty training efforts.

10. Answer "why" questions simply and honestly.

11. Provide comfort in the absence of parents, as this is stressful for children in the later part of this life stage.

XI. Physical Changes in Late Childhood (6 to 12 years)

A. Physical changes are slow but steady.

1. Primary teeth are lost, and permanent teeth begin to replace them.

2. Motor skills are even better developed than the earlier childhood life stage.

a. Playing ball

b. Writing

c. Boys seem better coordinated than girls in most motor activities. **(II-11)**

d. Girls surpass boys in activities involving rhythmic movements and balance.

3. Girls have a growth spurt approximately two years before boys. They are usually taller and heavier for a time.

XII. Mental Changes in Late Childhood

A. Mental development increases rapidly because life centers around school.

1. Children are fearful of beginning school.

2. They are fearful of leaving home to go to school.

3. Parental support and success at school helps to boost self-confidence.

B. They begin to build a base of knowledge and the short-term memory to recall learned content.

1. Learn to solve problems

2. Memory more complete
    a. Begin to understand abstract concepts like cause and effect
    b. Make better judgements
3. Long-term memory is not very developed.
4. Wide mood swings begin around age 12. **(II-12)**
    a. Periods of depression followed by happiness
    b. May feel restless and anxious
    c. May be difficult for parents to understand them

XIII. Social Changes in Late Childhood

A. Children who are 7 years old or are in the earlier part of this life stage prefer activities they can do alone rather than in a group.

B. Children 8 to 10 years old prefer group activities.

C. They like friends of the same sex, and peer acceptance is important. **(II-13)**

D. They like clubs/associations.

E. They develop a sense of self-worth. Parents and classmates are most influential.

F. This age group separates their assessment of self-worth into five areas:

1. Scholastically
2. Athletically
3. Physically
4. Socially
5. Morally

G. The basic needs of children in this age group is the same as those in the earlier life stages with the addition of:

1. Reassurance
2. Parental approval
3. Peer acceptance

XIV. Care of Clients in Late Childhood

A. Plan physical activities.

1. Plan independent activities for younger children in this life stage.

2. Provide for physical group activities for older children.

3. Compose groups by members of the same sex.

B. Provide emotional support by accepting the child's mood and being a good listener.

C. Allow problem solving and choices whenever possible. **(II-14)**

XV. Summary and Conclusion

A. Terms related to life stages

B. Physical changes during infancy

C. Mental changes during infancy

D. Social changes during infancy

E. Care for clients in infancy

F. Physical changes during early childhood

G. Mental changes during early childhood

H. Social changes during early childhood

I. Care for clients in early childhood

J. Physical changes during late childhood

K. Mental changes during late childhood

L. Social changes during late childhood

M. Care for clients in late childhood

The next lesson will discuss the adolescence through early adulthood life stages.

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

INTERACTION ITEMS:

1. What is meant by "assuming that all conditions are normal" in the definitions of physical changes, and mental changes?
2. Do you think we can group growth and development into age groups?
3. In which life stage would you expect to see the most dramatic physical changes occurring?
4. Have you ever wondered what an infant is thinking about?
5. Do babies really smile or is it just "gas bubbles"?
6. Why is safety a concern for an infant?
7. Why is potty training usually not accomplished before the age of two?
8. Have you ever had to answer the million "whys" of a young child? Were you successful?
9. Why do you suppose young children become more cooperative between the ages of 3 to 5 years?
10. How does setting routines help a child in the early childhood life stage?
11. Can you explain why boys seem better coordinated in most motor activities, yet girls are better in dancing and balance?
12. Do you remember having "moody" spells when you were around 12 years old?
13. Can you remember what you talked about with groups of friends during your late childhood?
14. Why must you limit choices if you are going to let a child make a decision?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES

1. Make group assignments in which each group gives a presentation to the class about the growth and development changes in late childhood.
2. Role-play situations that demonstrate how the health care assistant should approach infant clients.

ANSWERS TO EVALUATION ITEMS:

1. c
2. a
3. d
4. d
5. a
6. b
7. a
8. d
9. c
10. d
11. d
12. b
13. b
14. c
15. d
16. c
17. b
18. b
19. d
20. c
21. a
22. a
23. c
24. b
25. a
26. b
27. c
28. a
29. c
30. a

LESSON PLAN: 2

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

EVALUATION ITEMS:

Circle the letter that corresponds to the best answer.

1. What must be assumed about each life stage in order to associate it with an age group?

   a. Growth and development are the same for all people.
   b. An average of those in the group has been established.
   c. All factors affecting growth and development are normal.
   d. People cannot be grouped effectively according only to their age.

2. Mental changes that occur as a normal process of growth and development:

   a. Include sensory and emotional changes.
   b. Are influenced by the gender of the individual.
   c. Cannot be measured until the child can talk.
   d. Cannot be measured until the child is school-age.

3. What are social changes?

   a. Needs that are genetically determined in each person's DNA code
   b. Needs that can be studied from observing animal behavior
   c. Sensory and motor changes that occur during adolescence
   d. Interactions and relationships with other people

4. Each person passes through certain stages of growth and development, what does each stage include?

   a. Physical development, language development, and need for love
   b. Social development, capacity for love, and physical development
   c. Mental development, physical development, and language development
   d. Social development, physical development, and mental development

5. In which life stage does the most dramatic and rapid changes in growth and development occur?

   a. Infancy
   b. Adolescence
   c. Middle adulthood
   d. Late adulthood

6. When can you expect an infant's baby teeth to begin erupting?

   a. 1 month
   b. 3 months
   c. 6 months
   d. 9 months

7. Infants show emotional development by exhibiting which of the following characteristics?

   a. Signs of distress, anger, and fear
   b. Signs of sucking and grasping
   c. Signs of smiling and laughing
   d. Signs of gurgling and spitting

8. Physical development in infancy is evident when an infant can complete which of the following tasks?

   a. Put two words together
   b. Stack blocks
   c. Potty training
   d. Grasp an object

9. One sign of mental development in infancy is when the child first responds to verbal requests. By what age does this usually occur?

   a. 4 months
   b. 6 months
   c. 9 months
   d. 12 months

10. Social development in the newborn progresses from:

   a. Non-existence to very little social development until the age 2.
   b. No existence to rapid adjustment to the needs of the mother.
   c. Self-centeredness to gradual recognition of others by 4 months.
   d. No social needs to very little social needs until after age 1.

11. A sign of social development in infancy occurs when infants socialize freely with familiar people. By what age does this usually occur?

   a. 3 months
   b. 4 months
   c. 6 months
   d. 12 months

12. Safety is a concern when caring for all clients. When caring for infants, safety considerations are:

    a. Unimportant for infants under 6 months of age.
    b. Always important regardless of age.
    c. Minimal once the child begins to crawl.
    d. Important once their vision is cleared.

13. By 4 to 6 months, of age, babies can feel distress and fear. You can lessen these feelings by:

    a. Leaving the infant alone often.
    b. Protecting the infant from loud noises.
    c. Rarely touching the infant .
    d. Exposing the infant to many loud noises.

14. Which of the following developmental tasks occur by the end of early childhood?

    a. Child is able to walk, is potty trained, but cannot eat most adult food yet.
    b. Child is able to walk and run, can learn to write, but is not potty trained.
    c. Child can eat most adult food, can walk and run, and is potty trained.
    d. Child has all deciduous teeth, can smile, and pick up objects.

15. Why is potty training usually successful in early childhood more so than in infancy?

    a. Child is now big enough to wear training pants.
    b. Mother has more time to devote to potty training.
    c. Child now understands verbal commands.
    d. Child can now control voluntary muscles necessary and instructions for potty training.

16. Toddlers exhibit mental development in early childhood by which of the following?

    a. Becoming more dependent on mother
    b. Developing memory for reading and writing
    c. Becoming more attached to father around age 3.
    d. Preferring to be left alone than with be either parent.

17. Two-year old children:

    a. Ask many "why?" questions.
    b. Have short attention spans.
    c. Have active imaginations.
    d. Are completely independent.

18. A dramatic social change occurs around age 2, known as the "terrible twos." This period is characterized by:

    a. Playing well with other children.
    b. A "no" and "mine" stage.
    c. Controlling their emotions.
    d. Becoming agreeable and social.

19. Children become more social and cooperative between the ages of:

    a. 1 to 3 years old
    b. 2 to 3 years old
    c. 2 to 8 years old
    d. 5 to 6 years old

20. When planning play activities for toddlers in the early childhood life stage, you must remember that:

    a. They like to engage in free-time group play.
    b. They are not interested in structured play.
    c. They are more likely to engage in parallel play.
    d. They are too dependent on mother to play in her absence.

21. By providing routines, consistency, and order for children in early childhood, which basic needs are being met?

    a. Security
    b. Affection
    c. Morality
    d. Shelter

22. When will a child in early childhood typically engage in social parallel play?

    a. 2 years old
    b. 4 years old
    c. 6 years old
    d. 8 years old

23. In late childhood, differences begin to develop between boys and girls. Which of the following statements are true of this life stage?

    a. Girls have better motor coordination than boys.
    b. Boys surpass girls in rhythmic movement.
    c. Girls are usually taller and heavier than boys.
    d. Boys are usually taller and heavier than girls.

24. Physical changes during late childhood occur:

   a. Rapidly and steadily.
   b. Slowly and steadily.
   c. Rapidly and in spurts.
   d. Slowly and in spurts.

25. Mental development during late childhood:

   a. Increases rapidly since life centers around school.
   b. Includes the development of a good long-term memory.
   c. Does not include problem-solving abilities.
   d. Is characterized by mood swings at age 6.

26. In the early part of late childhood, children tend to feel:

   a. Happy about the prospect of beginning school.
   b. Frightened and uncertain about beginning school.
   c. Unconcerned about the absence of parents at school.
   d. Happy about becoming independent of the parents.

27. Which of the following is an important social aspect of children in the latter part of late childhood?

   a. They like friends of the opposite sex.
   b. Peer acceptance is unimportant.
   c. Parents and classmates are most influential.
   d. They avoid clubs/associations.

28. Children in the earlier part of late childhood seem to have different social needs than those in latter part. The younger children:

   a. Prefer activities they can do alone.
   b. Prefer sports group activities.
   c. Do not seem to need peer approval.
   d. Prefer independent activities that are pre-planned.

29. Children 8 to 10 years old prefer activities that are:

   a. Independent activities that are unstructured.
   b. Group activities with friends of both sexes.
   c. Group activities with friends of the same sex.
   d. Perfer independent activities that are pre-planned.

30. Children in late childhood can begin to problem-solve because:

   a. They build the short-term memory to recall learned content.
   b. Their long-term memory is totally developed in this stage.
   c. This is necessary for positive involvement in group activities.
   d. All of the above.

HO 1

AVERAGE PHYSICAL, MENTAL, AND SOCIAL DEVELOPMENTS IN INFANCY

AVERAGE PHYSICAL, MENTAL, AND SOCIAL DEVELOPMENTS IN INFANCY
(Birth to 1 year)

Age	Physical Development	Mental Development	Social Development
0 to 6 months	Weight will average between 6 to 8 pounds	Can suck at birth	Deliberately smiles at 3 weeks
	Average birth length is 19 to 21 inches	Grasps at birth	Recognizes others at 4 months
	Vision is usually fuzzy and blurred at birth	Kicks at birth	Laughs at 4 months
	Hearing is slightly less than an adult's	Shows signs of distress	
	Baby teeth begin to erupt at three months	Shows signs of anger	
	Can sit momentarily and turn from abdomen to back at three months	Shows signs of fear	
	Inspects hands and reaches for objects at 4 months	Fear may occur from loud noises or sudden loss of support	
6 to 12 months	Weight will average between 25 to 30 pounds at 12 months	May respond to verbal requests at nine months	Fear of strangers does not occur before 4 months
	Length will average between 25 to 30 inches at 12 months		Appears to become equally attached to both mother and father
	Can lift a cup by the handle and look for a fallen object at 6 months		
	Begin to recognize familiar things and people around 9 months		
	Says words like "mama" or "papa" around 9 to 12 months		
	Begins to crawl and stand supported at nine months		
	Takes first step around one year		

AVERAGE PHYSICAL, MENTAL, AND SOCIAL DEVELOPMENTS IN EARLY CHILDHOOD

AVERAGE PHYSICAL, MENTAL, AND SOCIAL DEVELOPMENTS IN EARLY CHILDHOOD (1 TO 6 YEARS)

Age	Physical Development	Mental Development	Social Development
1 to 3 years	Physical growth slows down after infancy Unable to control voluntary muscles until about age two Can perform minor tasks involving motor coordination such as stacking blocks Can walk	Becomes increasingly independent Interested in exploring their surroundings Able to count and solve simple puzzles around age three Language develops Has short attention span and many interests at age two	Has a self-centered attitude Does not play well with other children Continuously says "no" and "mine" Has no control over emotions or expressions
3 to 6 years	Motor skills are improved at around age three Can run Can put words together	Becomes less dependent on mother and more attached to father Continuously asks "why" around age four Has an active imagination Memory has developed and child is ready to learn to read and write Develops self-awareness and become curious about their own sex organs	Becomes more cooperative and social between ages of three and five Friends of the same sex are important at around age six Gender roles become apparent Becomes more agreeable Begins to understand right and wrong

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

SCOPE OF UNIT:

This unit explores the life stages of human beings. Topics on basic human needs, the aging process, Alzheimer's Disease, and death and dying are included. Correct approaches in providing care for mentally confused clients are a part of this unit as well.

INFORMATION TOPIC: VI-3 OR DEMONSTRATION:

ADOLESCENCE - EARLY ADULTHOOD LIFE STAGES
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Identify at least two physical changes that occur in adolescence.
2. Identify at least two mental changes that occur in adolescence.
3. Identify at least two social changes that occur in adolescence.
4. Apply knowledge of the aging process to the care of adolescent clients.
5. Identify at least two physical changes that occur in early adulthood.
6. Identify at least two mental changes that occur in early adulthood.
7. Identify at least two social changes that occur in early adulthood.
8. Apply knowledge of the aging process to the care of clients in early adulthood.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. Chalk and blackboard
2. Skeletorso

INFORMATION ASSIGNMENT:

Read Lesson Plan 3 prior to class and be prepared to discuss information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991.

Lefrancois, Guy R. *The Lifespan*. 4th ed. Belmont, CA: Wadsworth Publishing Company, 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990.

INTRODUCTION:

Adolescence is the life stage in which many physical and social changes occur. Sexual maturity develops and peer approval is extremely important in this life stage. It is essential for the assistant to learn how to provide emotional support for adolescents without passing judgements or giving advice.

Early adulthood is the stage in which physical development peaks and mental development progresses. Career choices and values are important for people in early adulthood. The assistant can care for young adults by being supportive and providing referrals for assistance during illness for financial and personal needs.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

OUTLINE:

I. Physical Changes in Adolescence (12 to 20 years) **(II-1)**

   A. Secondary sex characteristics begin to appear around age 12.

      1. Girls develop breasts and begin menstruation.

      2. Hair growth appears under the arms and public area appear in both girls and boys.

   B. Sexual organs develop. Sexual maturity develops around age 14.

      1. Girls begin menstruation.

      2. Boys begin sperm production.

   C. This is a rapid physical growth period for both sexes.

      1. There is rapid muscular development.

      2. Skeletal growth results in increased weight.

      3. Sudden gain in weight and height occur before muscular coordination resulting in awkwardness and clumsiness.

      4. Growth period occurs between the ages of 11 to 13 for girls.

      5. Growth period occurs between the ages of 13 to 15 for boys.

II. Mental Changes in Adolescence

   A. They can think systematically, logically, and abstractly.

   B. Intense idealism appears.

      1. Develop a moral code **(II-2)**

      2. Determined to live accordingly

   C. The knowledge base expands with experience and continued education.

   D. Stress may occur due to conflict of being caught between childhood and adulthood.

- E. Teenagers may allow peer pressure to change their attitudes.
    - 1. May be in conflict with previously developed values
    - 2. May observe changes in behavior.
- F. Near the end of this life stage, teenagers feel more comfortable with their self identity.

III. Social Changes in Adolescence

- A. Peer approval is extremely important.
    - 1. Very close with groups of their own sex
    - 2. Begin to be involved in activities with opposite sex.
- B. They desire more independence from family control. **(II-3)**
    - 1. Social problems may develop that are related to feelings of inadequacy and insecurity. Adolescents need reassurance, support, and understanding.
        - a. Eating disorders occur more frequently in females than males and can be life-threatening if not treated.
            - 1) Anorexia nervosa
            - 2) Bulimia
            - 3) Overeating
        - b. Drug and alcohol abuse
            - 1) Frequently occurs in adolescence
            - 2) Attempt to relieve stress or anxiety
            - 3) May occur because of peer pressure
            - 4) Experimentation with feelings the chemicals produce
            - 5) Rehabilitation can occur if the substance abuse is treated.
        - c. Suicide one of the leading causes of death in adolescents. **(II-4)**
            - 1) Depression or grief
                - a) Grief over a love affair

        - b) Failure in school
        - c) Inability to meet expectations
        - d) Influence of suicidal friends or parents
        - e) Lack of self-esteem
    - 2) Warning signs of planning a suicide (most adolescents give warning signs.)
        - a) Verbal statements
        - b) Sudden changes in appetite and sleep habits
        - c) Excessive fatigue or agitation
        - d) Withdrawal and moodiness
        - e) Loss of interest in hobbies
        - f) Drug or alcohol abuse
    - 3) Need reassurance, support, and understanding
- 2. To help them develop self-confidence, adolescents usually move away from family toward closer relations with peer groups.
- 3. Interaction with persons of the opposite sex increases.
- 4. Most of the time, adolescence is happy and excited with only occasionally turbulence and stress.

IV. Care of Clients in Adolescence

- A. Provide emotional support when needed.
    - 1. Be a good listener.
    - 2. Treat their decisions with respect.
- B. Never ignore possible signs of suicide, tell somebody who can help. **(II-5)**
    - 1. Signs are calls for help.
    - 2. The adolescent usually responds to efforts of assistance.
    - 3. Support and understanding may help, they need psychological counseling.
- C. Encourage counseling for eating disorders.

D. Encourage help for drug or alcohol abuse.

V. Physical Changes in Early Adulthood (20 to 40 years)

   A. The 20s are the peak of physical development. Physical development is now complete.

   B. There are no dramatic age-related changes of the senses throughout early adulthood.

      1. Some visual changes in focusing occur around age 40.

      2. Gradual noise-induced hearing loss may also occur around age 40.

   C. Health is generally good.

      1. Adults contract fewer common infections, probably because they have a fully developed immune system.

(II-6)

      2. Chronic complaints may increase, e.g.,back aches.

      3. This is high-risk age for males to have heart attacks.

VI. Mental Changes in Early Adulthood

   A. Mental development usually continues through this stage.

      1. Dealing with independence

      2. Making career choices

      3. Establishing values

   B. Work or career is important, and it serves three purposes. **(II-7)**

      1. Pays the bills

      2. Allows for social interaction

      3. Allows us to achieve a sense of self-worth and identity

   C. Adults at this stage become more tolerant of others.

   D. Adult problem-solving skills are utilized.

VII. Social Changes in Early Adulthood

   A. Social development moves from peer groups to association with others who have similar ambitions and interests.

B. Married **(II-8)**

1. For happiness and companionship

2. Provides a social setting for raising children

C. Unmarried

1. Can be voluntary or involuntary

2. Includes the never-married, divorced or separated, and widowed

D. Today's early adults may contribute to changing traditional patterns of society by:

1. Adopting non-traditional gender roles

a. Women may have non-traditional careers such as construction or administration.

b. Men may have non-traditional careers such as nursing or secretarial work.

2. No longer feeling bound to stereotypical roles to be accepted by society.

VIII. Care of Clients in Early Adulthood **(II-9)**

A. Most care will be for acute physical situations.

1. Accidents

2. Disease conditions

B. They may need referrals for assistance during illness for financial and personal needs.

1. They may need financial assistance to pay the bills during illness.

2. Encourage the person to focus on positive aspects of personal attributes, as the inability to work may decrease self-esteem.

C. Support changing social roles even when they are non-traditional. Be tolerant of others' choices.

D. Encourage personal involvement in decisions regarding health care.

E. Speak slowly and clearly if there is a hearing deficit.

F. Encourage the wearing of reading glasses and provide good lighting for those who have visual deficits.

IX. Summary and Conclusion

A. Physical changes during adolescence

B. Mental changes during adolescence

C. Social changes during adolescence

D. Care for adolescents

E. Physical changes during early adulthood

F. Mental changes during early adulthood

G. Social changes during early adulthood

H. Care for clients in early adulthood

The next lesson will discuss the middle through late adulthood life stages.

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

INTERACTION ITEMS:

1. Would you say that adolescence was the most difficult period in growing up?
2. How old were you when you decided what things were right and what were wrong?
3. When do you first remember wanting to be out from under the control of your parents?
4. Do you know anyone who has talked about committing suicide?
5. Would you tell someone if your friend were planning suicide?
6. What may account for early adults not getting as many common infections?
7. Do you believe that work allows people to achieve a sense of self-worth and identity?
8. Why do you think people get married?
9. Why is the physical health care of a young adult mostly likely to be acute care?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Make group assignments in which each group gives a presentation to the class about the growth and development changes in adolescence.
2. Role-play situations that demonstrate how the health care assistant should approach clients in early adulthood.

ANSWERS TO EVALUATION ITEMS:

1. b
2. d
3. b
4. c
5. c
6. b
7. b
8. d
9. a
10. b
11. d
12. c
13. b
14. b
15. c

LESSON PLAN: 3

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

EVALUATION ITEMS:

Circle the letter that corresponds to the best answer.

1. Secondary sex characteristics begin to appear during adolescence. At what age does this usually occur?

    a. Around the age of 11
    b. Around the age of 12
    c. Around the age of 13
    d. Around the age of 14

2. Why does the adolescent suddenly seem to become awkward or clumsy?

    a. Adolescents move so quickly their coordination cannot keep up.
    b. Adolescents fail to pay attention to where their feet are.
    c. They start their bodies into motion before the muscle coordination is ready.
    d. They undergo sudden gains in weight and height before the muscle coordination occurs.

3. Mental development during adolescence is such that adolescents:

    a. Can make decisions but cannot accept responsibility for their actions.
    b. Experience conflict from being treated as both an adult and a child.
    c. No longer expand their knowledge base.
    d. Respond less and less to peer influence.

4. Toward the end of adolescence, teenagers:

    a. Are uncomfortable with who they are and feel immature.
    b. Are unable to gain control of their feelings and feel inadequate.
    c. Feel more comfortable with their identity.
    d. Resist independence and mental development.

5. Many social problems that develop in adolescence are related to feelings of inadequacy and insecurity. Examples of such problems include:

    a. Refusal to attend college.
    b. Disrespect toward of authority.
    c. Drug and alcohol abuse.
    d. Obsessive compulsive behavior.

6. Adolescents usually move away from family to associate with peer groups because:

   a. They want to be noticed with people their own age.
   b. Groups help them to develop self-confidence.
   c. They like to make decisions.
   d. They feel there is safety in numbers.

7. Adolescents need a lot of emotional support that can be provided by:

   a. Setting times to meet with them and changing the time often.
   b. Listening to their decisions and treating them with respect.
   c. Reminding them often that they are not yet adults.
   d. Providing reality by pointing out flaws in their decisions.

8. Which of the following are suicidal signs in adolescent behavior and indicate a need for professional help?

   a. Excessive fatigue or agitation
   b. Withdrawal and moodiness
   c. Loss of interest in hobbies
   d. All of the above

9. The 20s in early adulthood are characterized by:

   a. The peak of physical development.
   b. The last stage of physical development.
   c. A decline in the ability of the eye to focus.
   d. A decline in toleration for extreme temperatures.

10. The mental development of persons in early adulthood is:

   a. Totally developed.
   b. Continuing to develop.
   c. Beginning to decline.
   d. Peaked by the 30s.

11. The mental development of young adults usually focuses on which of the following?

   a. Dealing with independence and having children leave home.
   b. Experiencing memory and having intense idealism.
   c. Establishing values and dealing with the death of friends.
   d. Making career choices and establishing values.

12. Social development of young adults:

   a. Continues to be involved in peer groups.
   b. Accepts the traditional sex roles.
   c. Associates with others who have similar ambitions.
   d. Remains basically unchanged.

13. How may the social development of young adults contribute to changes in traditional patterns?

    a. Being intensely politically active.
    b. Accepting non-traditional gender roles.
    c. Accepting stereotypical roles.
    d. Choosing the status quo over change.

14. When are individuals in early adulthood more likely to respond positively to hospitalization?

    a. They have no sick leave to cover their expenses while they're off work.
    b. They are encouraged to be involved in the planning of their own care.
    c. They are married and have children.
    d. They are single and no one depends upon them.

15. How can you provide safety for those individuals in early adulthood who have visual deficits?

    a. Rearrange their furniture.
    b. Get assistance before ambulating.
    c. Encourage wearing of reading glasses.
    d. Do not allow them to read.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

SCOPE OF UNIT:

This unit explores the life stages of human beings. Topics on basic human needs, the aging process, Alzheimer's Disease, and death and dying are included. Correct approaches in providing care for mentally confused clients are a part of this unit as well.

INFORMATION TOPIC: VI-4 OR DEMONSTRATION:

MIDDLE - LATE ADULTHOOD LIFE STAGES
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Identify at least two physical changes that occur in middle adulthood.
2. Identify at least two mental changes that occur in middle adulthood.
3. Identify at least two social changes that occur in middle adulthood.
4. Apply knowledge of the aging process to the care of clients in middle adulthood.
5. Identify at least two physical changes that occur in late adulthood.
6. Identify at least two mental changes that occur in late adulthood.
7. Identify at least two social changes that occur in late adulthood.
8. Apply knowledge of the aging process to care of clients in late adulthood.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Age-Related Postural Changes
2. Audiovisuals available from the Missouri Vocational Resource Center
    a. *The Confused Resident: Strategies for Quality Care*, video #9, 25 min.
    b. *Abnormal Signs and Symptoms*, video #17, 10 min.
    c. *Sharing the Burden (Alzheimer's)*, video #1, 1 hr. 45 min.

3. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *Ready or Not, Here I Come*, video (TF #78), 52 min.
    b. *Caregiving with Grace*, video (TF #74), 28 min.
    c. *The Sixth Sense*, video (TF #173), 27 min.
    d. *Feeling Good with Arthritis*, video (TF #154), 60 min.
    e. *Common Physical Disorders of the Elderly*, 3 videos (TF #7), 5 hr. total
    f. *Everybody's Doing It, 1988 Governor's Conference*, video (TF #111), 45 min.
    g. *Working with Aged*, video (TF #45), 45 min.
    h. *Whisper, the Waves, the Wind*, video (TF #50), 28 min.
4. Television and VCR
5. Chalk and blackboard
6. Skeletorso

INFORMATION ASSIGNMENT:

Read Lesson Plan 4 prior to class and be prepared to discuss information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991.

Lefrancois, Guy R. *The Lifespan*. 4th ed. Belmont, CA: Wadsworth Publishing Company, 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990.

INTRODUCTION:

In middle adulthood through late adulthood, life's pace begins to slow down. Health may not be as good as it was during early adulthood. The assistant will most likely play a major role in providing safety and care for people in late adulthood. Therefore, it is essential for the assistant to be aware of all the physical, mental, and social changes that occur from middle adulthood to late adulthood.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

OUTLINE:

I. Physical Changes in Middle Adulthood (40 to 65 years)

  A. Life's pace begins to slow down. Health may not be as good as during the early adult years.

    1. There is usually no further growth in height. **(II-1)**

    2. The acquisition of fatty tissue may occur.

      a. On the hips and abdomen for women

      b. On the mid-section for males

    3. Loss of skin elasticity causes the development of wrinkles.

    4. Hair begins to thin.

    5. Joints begin to stiffen.

    6. They begin to experience loss of muscle tone and loss of muscle size.

    7. Changes in sensory capabilities include:

      a. Greater farsightedness

      b. Gradual loss of hearing, especially the high tones

    8. Major organ systems become less effective.

      a. Arteriosclerosis is common.

      b. They are more susceptible to heart disease, cancer, arthritis, cirrhosis, hypertension, and osteoporosis.

    9. Sex glands' production of hormones slows down.

      a. In the late 40s to early 50s for most women; menopause

      b. In the fifties or later for men

II. Mental changes in Middle Adulthood

- A. Mental capacity can continue to increase, especially when advancing in career.
- B. They may experience depression with the realization that life may be half over. **(II-2)**
    1. Physical signs of aging begin to appear.
    2. Parents and friends begin to die.
    3. Career and financial goals have usually peaked.
- C. The experiences of adults throughout the life stages contribute to their thinking abilities.
    1. They acquire an understanding of life.
    2. This helps in coping with the many different stresses associated with the physical changes of aging.

III. Social Changes in Middle Adulthood

- A. Children leave the home (known as the "empty nest" period.) **(II-3)**
    1. Relationships with adult children tend to remain close even after they have left home.
    2. This is especially so when the children are still in their 20s.
- B. Middle-aged children tend to have warm and supportive relationships with their parents.
- C. Middle-aged may have the responsibility of caring for aging parents.
- D. Parents and friends begin to die.
- E. Married couples have more time together, which often leads to a happier marriage.
- F. Divorce is less common during this life stage. Remarriage is more common for men than women.
- G. Relationships with friends become closer and more valued.

IV. Care of clients in Middle Adulthood

  A. Encourage exercise to maintain muscle mass and reduce fatty tissue. **(II-4)**

  B. Use assisting devices for feeding or walking if joints are stiff or painful.

  C. If there is a hearing loss, speak slowly and clearly while facing the client. Encourage the use of a hearing aide if the client has one. You need to know the degree of hearing deficit before deciding how to approach the client.

  D. If needed, encourage the client to wear glasses while reading.

  E. If appropriate, encourage the client to select low fat, low salt, foods.

V. Late Adulthood (65 years to --) - this is the second life stage with a great number of changes. The body systems are slowing down and becoming less effective. The results are age-related changes occurring in each system. The care for individuals in this life stage is discussed by each individual's body system, but you must remember the whole person when providing care. No one person will have deficits in only one system. (HO 1)

  A. Physical changes **(II-5)**

    1. Age-related physical changes affecting appearance include:

      a. Changes in posture - appear to be shorter or have a stooping posture

        1) Due to thinning of cartilage between vertebrae

        2) Osteoporosis causing bone loss

      b. Loss of muscle tone

        1) Causes fatigue

        2) Poor coordination

      c. Decline in the functioning of the nervous system

        1) Hearing loss

        2) Less tolerance for temperatures too hot or too cold

        3) Visual impairment

        4) Loss of taste and smell sensitivity

      d. Decline in breathing capacity, resulting in shortness of breath

      e. Loss of hair or hair pigmentation

        - f. Loss of teeth or recession of gums
        - g. Decline in the functioning of the urinary system
            - 1) Incontinence
            - 2) Nocturia
            - 3) Frequency of urination
        - h. Lower susceptibility to acute infections
        - i. Higher susceptibility to chronic conditions
            - 1) Arthritis
            - 2) Heart disease
            - 3) Arteriosclerosis
            - 4) Respiratory problems
        - j. Loss of skin elasticity that results in wrinkles
    - 2. Physical changes of aging usually occur slowly, over a long period of time.

VI. Mental Changes in Late Adulthood (HO 3)

- A. Mental capacity varies among individuals.
    - 1. Some individuals remain well-oriented well into their 90s.
    - 2. Others become disoriented at a much earlier age.
- B. There is little general decline in one's intellectual performance before age 67; but it is more likely that response time is slower, giving the impression of a decline in intellectual ability. **(II-6)**
    - 1. Recent memory is usually the first to decline
    - 2. Long-term memory is usually the last to decline.
- C. Emotional stability varies among individuals.
    - 1. Changing lifestyle requires emotional adjustment if successful aging is to occur.

2. Changing relationships require emotional adjustment if successful aging is to occur
    a. With children
    b. Peer relationships changing after retirement
    c. Changing lifestyles

D. Emotional problems may occur from attempting to cope with the increasing number of losses.

1. Loss of health
    a. Aging does not necessarily mean illness.
    b. The human body will eventually wear out.
    c. Some behavior may be related to illness. For example, a client may be irritable and grouchy due to pain.
    d. The sensory system gradually deteriorates, which may lead to confusion or withdrawal.
    e. Loss of independence in care often leads to poor self-image.
    f. A change in appearance can cause the client to have negative feelings about self.

2. Loss of spouse, family, friends, and pets
    a. Such losses can create feelings of being all alone and that "no one cares," which can lead to depression.
    b. The client may no longer feel loved.
    c. The client may have no one around to love.
    d. No one to have intimate relationships with
    e. The client may not feel needed.

3. Loss of job and home
    a. Less financial security without a job
    b. Feeling not needed by society as a resourceful human
    c. Loss of independence to maintain a home and loss of decision-making power

        - d. Loss of importance on the job
        - e. Loss of friends - reminds the people of how the end of their lives may be near

- E. Inability to cope may be responsible for emotional status. The client may:
    - 1. Become dependent, not wanting to take any responsibility for his or her life.
    - 2. Become overly suspicious, no longer trusting others.
    - 3. Escape from reality by blaming others for his or her troubles.
    - 4. Want a greater amount of attention.
    - 5. Become depressed due to loneliness, boredom, and losses he or she has experienced.
    - 6. Become angry at the prospect of becoming older and more dependent.
    - 7. Become withdrawn.

VII. Social Changes in Late Adulthood Stage

- A. The social needs of the older adult are the same as those of all other life stages.
    - 1. Love and belonging
    - 2. Self-esteem (positive self-image)
    - 3. Acceptance
- B. Most marriages seem to become happier. **(II-7)**
    - 1. Voluntary retirement can be satisfying.
    - 2. Family relationships are the most important social relationships.
        - a. The spouse is first and then children.
        - b. Grandparenting is usually rewarding.
    - 3. Close friends serve more important roles than in the past.
    - 4. Satisfaction with life appears to increase with age if:
        - a. Health remains fairly good
        - b. Income is sufficient

c. Personality is inclined to be positive

VIII. Care of clients in Late Adulthood - because all of the body systems are less effective, client care is described according to each related system. **(II-8)**

A. Musculoskeletal system

1. Observe for signs of injury or disorders, such as bruises, redness, swelling, complaints of pain, etc.
2. Use good safety measures; keep halls and doorways uncluttered. Clean up spills, avoid hazardous conditions.
3. Encourage the use of safety devices, such as handrails, bed rails, call bells, walkers, etc.
4. Provide aids to improve circulation, such as footrests, comfortable chairs, good positioning and body alignment, changing of position, and supportive devices.
5. Encourage the use of well-fitting, supportive shoes.
6. Encourage self-help and exercise within the limits of client's capabilities and physician's orders.
7. Use care in handling and assisting clients; avoid bumping, bruising, or other injuries.
8. Support joints in positioning.
9. Assist with regular ROM and other exercises as ordered.
10. Encourage good nutrition, including foods high in protein and calcium. Also encourage fluid intake.

B. Nervous system

1. Be aware of the need for good communication. Give clear, simple directions. If necessary, use aids to communicate, such as pictures, word cards, and gestures.
2. Encourage activity, especially in small groups.
3. Assist with ROM and other exercises. Cooperate with the physical therapy department.
4. Provide for rehabilitation measures per physician's orders.
5. Provide a safe and secure environment.
6. Offer empathy, reassurance, and encouragement.

7. Praise even small successes.

8. Encourage several short periods of activity rather than long, overtiring periods.

C. Cardiovascular system

   1. Observe for signs and symptoms, such as edema, shortness of breath, pulse irregularity, and cyanosis.

   2. See that client avoids the use of garters, tight-fitting clothing, and positions which restrict circulation.

   3. Turn and reposition client frequently. Elevate his or her extremities for better circulation.

   4. Provide good skin care. Avoid pressure areas when positioning the client.

   5. Prevent bumps and bruises.

   6. See that client uses support hose, if indicated and ordered.

   7. Prevent exposure to infection.

   8. Discourage overeating. Have client avoid salty foods and snacks.

   9. Encourage exercise or give ROM exercises.

D. Sensory system

   1. Provide good light for client.

   2. Encourage short periods of "eye work," such as reading and handwork, to avoid eye strain.

   3. Keep client's glasses clean.

   4. Provide an uncluttered, safe environment.

   5. Check client's ears for wax build up; keep them clean.

   6. Do not use sharp objects, such as hairpins or Q-tips to clean a client's ears.

   7. Report earwax or other observations to charge nurse.

   8. Learn how to operate hearing aids and encourage client to use one, if needed.

   9. Keep the helpless client's nose clean; trim nose hairs carefully.

10. Provide easy-access container for disposing of soiled tissues.

11. Provide good oral hygiene for all clients, especially the helpless. Encourage fluid intake.

12. Use good feeding techniques and check the temperature of food before feeding.

E. Respiratory system

1. Avoid exposing the client to colds and other respiratory infections.

    a. Use good hand washing procedure.

    b. Observe for and report symptoms such as difficulty breathing, coughing, rattling lung sounds, etc.

    c. Encourage deep breathing when possible. Position the client to aid breathing and reposition the client frequently.

    d. Avoid overtiring the client, but encourage exercise.

    e. Discourage smoking.

    f. Encourage the intake of fluids and juices.

    g. Avoid sudden temperature changes. Use sweaters, lap blankets, etc. during the winter and when the air conditioning is on.

F. Digestive system

1. Promote good oral hygiene; observe oral cavity, and gums, denture fit, etc.

2. Observe for symptoms and complaints such as nausea, pain, distention, "heartburn," loss of appetite, constipation, and diarrhea.

3. Use good dietary procedures. Encourage a balanced diet and allow the client plenty of time to eat. Encourage self-feeding; use assistive utensils if needed.

4. Offer and encourage adequate fluid intake.

5. Encourage good toilet habits; toilet regularly. Provide privacy, ensure safety.

G. Urinary system

1. Provide for regular toileting, remind the client or take if necessary. Provide privacy and ensure safety.

2. Provide incontinent care and peri-care/catheter care.

3. Implement and support bladder training program.

4. Offer encouragement and avoid ridicule of incontinent client. Keep the client dry and change soiled clothing.

5. Note the amount, color, odor, or anything unusual about urinary output.

6. Observe for complaints of pain, burning, frequency, etc.

7. Observe male client for inability to void, swelling, etc.

8. Ensure adequate fluid intake, especially water. Push fluids if indicated. Record accurate intake and output measurements when ordered.

H. Reproductive system

1. Observe for signs of disorders.

    a. Female - genital swelling, redness, itching, infected glands, vaginal discharge, bleeding, and odor

    b. Male - urinary symptoms, especially inability to void, scrotal swelling

2. Check breasts for lumps during bath.

3. Keep genitalia clean, especially uncircumcised male foreskin.

I. Endocrine system

1. Encourage good nutrition and a balanced diet.

2. Work with the diabetic client to understand importance of diet, treatment, and exercise.

3. Observe for injury, sores, etc., especially with the diabetic client.

4. Keep client clean, especially good foot care.

5. Toenail trimming of a diabetic client should be done only by charge nurse.

J. Integumentary system

1. Maintain close observation of skin conditions, pressure points, and signs of skin problems.
2. Provide good skin care; keep client dry and clean; use lotion; give backrubs with special attention to bony areas.
3. Avoid pressure areas. Turn and position the client frequently, at least every two hours.
4. Use supportive devices; such as pillows, "egg carton" or air mattress, sheepskin, and heel/elbow pads.
5. Ensure regular bathing with attention to skin folds, perineal area, scalp, and feet. Avoid extreme water temperatures.
6. Be careful not to pull on the client's skin when positioning or turning. The skin's loss of elasticity causes tears to occur very easily.
7. Encourage good nutrition and adequate fluid intake.
8. Encourage exercise.
9. Avoid tight clothing such as garters and restraints.

K. Lymphatic system

1. Avoid injury to client and exposure to colds and other infections.
2. Note healing of sores and injuries.
3. Observe for glandular swelling, especially of neck, underarms, and groin.
4. Report complaints of pain.

IX. Summary and Conclusion

A. Physical changes during middle adulthood

B. Mental changes during middle adulthood

C. Social changes during middle adulthood

D. Care for clients in middle adulthood

E. Physical changes during late adulthood

F. Mental changes during late adulthood

G. Social changes during late adulthood

H. Care for clients in late adulthood

The next lesson will discuss mental confusion and how it relates to the aging process.

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

INTERACTION ITEMS:

1. Do people actually get smaller when they reach middle adulthood?
2. Why do some people become depressed at middle age or reach a so-called "mid-life crisis?"
3. Does the "empty nest" period signal the end of a relationship with the children?
4. Why is it important to encourage middle-aged clients to exercise?
5. Why do so many age-related physical changes occur in late adulthood?
6. Is it true that the intelligence of persons over 67 decreases dramatically?
7. Why do you think marriages seem to become happier during late adulthood?
8. Why do people in the late adulthood stage experience so many health problems?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES

1. Show audiovisuals.
2. Make group assignments in which each group gives a presentation to the class about the growth and development changes in middle adulthood.
3. Role-play situations in which life stages dictate how the Health Care Assistant should approach clients in late adulthood.

ANSWERS TO EVALUATION ITEMS:

1.	c
2.	c
3.	d
4.	b
5.	d
6.	a
7.	a
8.	a
9.	b
10.	a
11.	e
12.	d
13.	c
14.	b
15.	a
16.	b
17.	c
18.	d
19.	a
20.	b

LESSON PLAN: 4

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

EVALUATION ITEMS:

Circle the letter that corresponds to the best answer.

1. Physical changes that occur during the middle adulthood life stage include:

   a. Inability to reproduce.
   b. Greater nearsightedness.
   c. A slowing of hormone production.
   d. Further growth in height.

2. Most of the physical complaints of those in the middle adulthood life stage are related to:

   a. Midlife crises and/or mental and nervous breakdowns.
   b. Living a poor lifestyle during the early life stages.
   c. The major organ systems becoming less effective.
   d. Desperate attempts to get attention and affection.

3. What is a sign of injury that occurs in the musculoskeletal system during late adulthood?

   a. Decreased perception of hot and cold
   b. Decreased bladder muscle tone
   c. Mild impairment of sight and sound
   d. Redness and swelling of a joint

4. Mental development during the late adulthood life stage is usually characterized by little general decline in intellectual performance before what age?

   a. 60 years
   b. 67 years
   c. 75 years
   d. 80 years

5. Under what conditions does satisfaction with life usually appear to increase with age?

   a. If personality is inclined to be positive and people do not become grandparents
   b. If husbands and wives have more time together and children remain at home
   c. If family relationships decline and retirement is a forced decision.
   d. If health remains fairly good and income is sufficient.

6. Persons in the middle adulthood life stage may find changing social relationships resulting in:

    a. Closer relationships with friends.
    b. Alienation of children and friends.
    c. Withdrawal from social groups.
    d. Association with younger groups.

7. Men and women in the middle adulthood life stage can slow the process of aging by:

    a. Exercising regularly.
    b. Eating foods high in sodium.
    c. Limiting fluid intake.
    d. Limiting calorie intake.

8. When caring for an individual in the later part of the middle adulthood life stage with a hearing deficit, you can improve communication by:

    a. Speaking slowly and clearly while facing the client.
    b. Writing notes and memos.
    c. Using North American Sign Language.
    d. Giving the individual a new hearing aid.

Match the following declines in health in Column I with their causes in Column II.

Column I	**Column II**
______9. Stooping posture	a. Causes fatigue and poor coordination
______10. Loss of muscle tone	b. Cartilage between the vertebrae thins
______11. Decline in function of the nervous system	c. Incontinence, nocturia, and frequency
______12. Shortness of breath	d. Decreased breathing capacity
______13. Decline in the function of the urinary system	e. Hearing loss, less tolerance for temperatures too hot or too cold

Circle the letter that corresponds to the best answer.

14. Emotional adjustment during the late adulthood:

    a. Requires that old relationships be dissolved.
    b. Is necessary because of changing lifestyles.
    c. Is unnecessary because existing relationships continue.
    d. Requires that grandparents bond with their grandchildren.

15. Social needs of older adults:

    a. Are the same as those of all ages.
    b. No longer include the need of love.
    c. No longer include the need for self-esteem.
    d. Now include the right to commit suicide

16. During the social changes in late adulthood:

    a. Most marriages become unhappy and result in divorce.
    b. Family relationships are the most important social relationships.
    c. Satisfaction with life appears to always decrease with age.
    d. A positive personality is unimportant to feeling satisfied with life.

17. Which type of memory is usually the first to decline during late adulthood?

    a. Selective memory
    b. Long-term memory
    c. Short-term memory
    d. Recall memory

18. Which of the following is a safety precaution to take when caring for persons in late adulthood?

    a. Discourage exercise.
    b. Encourage ambulation without safety devices.
    c. Always use reality orientation methods.
    d. Keep halls and doorways uncluttered.

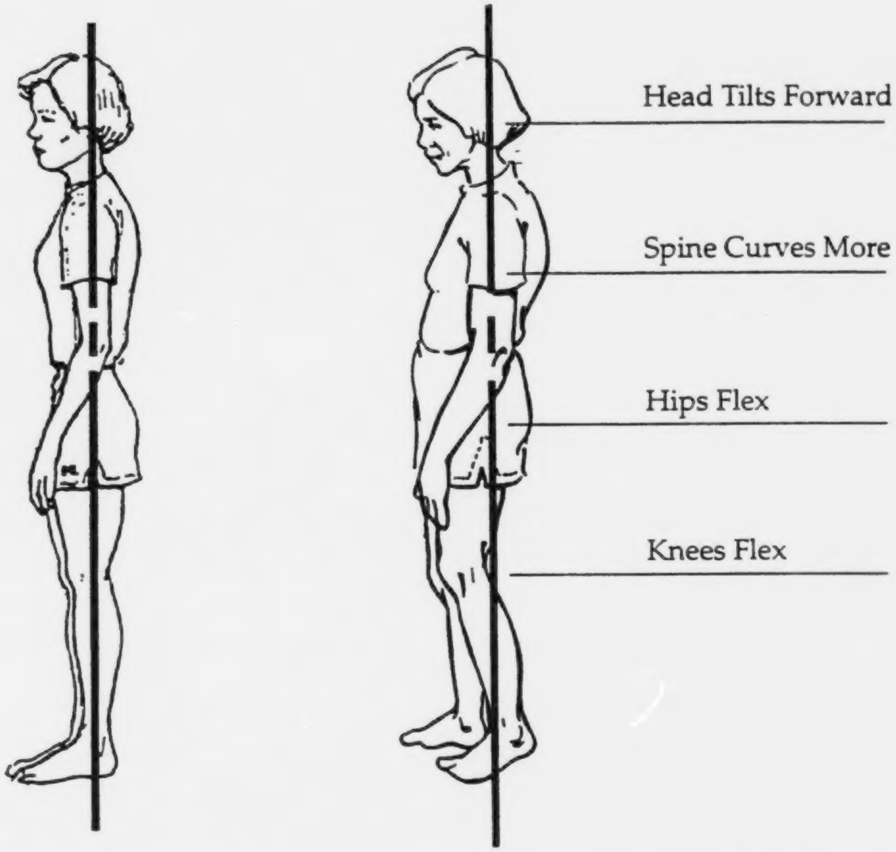
19. When caring for people in the late adulthood life stage, care must focus on deficits caused by the sensory system's ineffectiveness. Client care should include:

    a. Providing good oral hygiene.
    b. Removing excess ear wax with tweezers.
    c. Discouraging the use of hearing aids.
    d. Discouraging reading and handwork.

20. A person in their 40s in middle adulthood may begin to exhibit some physical changes, especially in the sensory systems. How may these changes occur?

    a. A decline in the ability to detect odors
    b. A decline in the ability of the eyes to focus
    c. A decline in the ability to detect hot and cold sensations
    d. A decline in the ability to tolerate extreme temperatures

AGE-RELATED POSTURAL CHANGES


Head Tilts Forward
Spine Curves More
Hips Flex
Knees Flex

Some Reasons for Changes

1. Decline in muscle strength and flexibility
2. Thinning, brittle bones
3. Arthritis or other bone or joint diseases
4. Lack of physical activity

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

SCOPE OF UNIT:

This unit explores the life stages of human beings. Topics on basic human needs, the aging process, Alzheimer's Disease, and death and dying are included. Correct approaches in providing care for mentally confused clients are a part of this unit as well.

INFORMATION TOPIC: VI-5 OR DEMONSTRATION:

MENTAL CONFUSION
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms introduced in this lesson to correct definitions.
2. Name two methods of identifying confused clients.
3. List three causes of confusion.
4. Name two emotional responses resulting from confusion.
5. List two behavioral responses resulting from confusion.
6. List two functional responses resulting from confusion.
7. Identify correct approaches in providing care for confused clients.
8. Identify correct methods of dealing with problem behaviors resulting from confusion.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. HO 1: Understanding Mental Confusion
2. *The Confused Resident: Strategies for Quality Care*, video #9, available from the Missouri Vocational Resource Center, 25 min.
3. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *Designing the Physical Environment for Persons with Dementia*, video (TF #184), 20 min.

b. *Before the Going Gets Rough (Part 1) & After the Going Gets Rough (Part II)*, video (TF #146)

c. *Compassion, I Suppose*, video (TF #79), 30 min.

4. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 5 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991.

Gentry, Linda. *Confused Resident Care*. University of Missouri-Columbia: Instructional Materials Laboratory, 1990.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publishers, 1991.

Simmers, Louise. *Diversified Health Occupations*. 2nd ed. Albany: NY. Delmar Publishers, Inc., 1988.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990.

INTRODUCTION:

Confusion is when one's thoughts are mixed up. Some confusion lasts for a short time because the cause of that type of confusion can be treated. Other types of confusion are caused by factors that cannot be "cured," such as Alzheimer's Disease or a stroke. In long-term care, clients' confusion will vary in cause and severity, but, in general, they are confused in some way every day.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

OUTLINE:

I. Terms and Definitions **(II-1)**

A. Acute - developing rapidly with pronounced symptoms and lasting a short time

B. Agnosia - loss of the ability to recognize familiar objects

C. Alzheimer's - a form of dementia that begins slowly, with an inability to name familiar objects

D. Aphasia - loss of the ability to use or understand language

E. Apraxia - loss of the ability to carry out planned movement at will

F. Catastrophic reaction - the response to a drastic shock or a sudden threatening condition, often occurs with dementia

G. Chronic - continuing over a long period of time or recurring frequently; chronic conditions begin insidiously, and symptoms are not as noticeable as in acute conditions

H. Confused - state of being mixed up

I. Confusion - a mental state characterized by disorientation regarding time, place, and/or person

J. Dehydration - loss of body's normal water content, which can affect both physical and mental functions

K. Dementia - severe impairment of cognitive functions such as thinking, memory, and personality

L. Disorientation - the state of mental confusion or loss of bearings in relation to the sense of person, place, or time

M. Hallucination - sensory perceptions that seem real to the person experiencing them but are not perceived by others

N. Overreaction - to react excessively or too strongly to a situation

O. Paranoia - suspiciousness inappropriate to reality; individual feels that everyone is picking on him or her or out to get him or her

P. Sundowning - a behavior in which a person becomes more agitated and disoriented during the evening hours

Q. Wandering - aimless walking, which may result in a client becoming lost

II. Identification of Confused Clients **(II-2)**

A. Observation of behaviors and responses

B. Appropriate use of the reality orientation if used by the facility

III. Causes of Confusion (HO 1) **(II-3)**

A. Physical factors

1. Disease of the central nervous system (brain)

a. Senile dementia of the Alzheimer type

b. Stroke

c. Brain damage

2. Lack of oxygen to the brain

3. Fluid, electrolyte, and nutrition difficulties (dehydration)

4. Undetected infections (temperature elevation)

5. Elimination difficulties (constipation)

6. Effects of medication

B. Sensory/emotional factors

1. Lack of stimulation or over stimulation (sensory overload)

2. Misinterpretation of sensory input (either poor vision, hearing, or dementia--aphasia, agnosia)

3. Depression

4. Hallucinations, delusions

C. Environmental factors

1. New surroundings (adjustment)

2. Isolation (decreased contact with other than confused people)

3. Restraints

4. Misinterpretation of the environment

IV. Emotional Responses **(II-4)**

A. Being suspicious

B. Being rude, angry, insulting

C. Being constantly restless or talkative

D. Seeing things not there (hallucination)

E. Hearing voices from past

F. Reliving situations from past

G. Not responding to anything

V. Behavioral Responses **(II-5)**

A. Having difficulty remembering how to do simple tasks or not finishing things started

B. Forgetting what day it is, what time of life, who you are

C. Losing, hiding, or misplacing things and looking all over for them

D. Wandering or getting lost

VI. Functional Responses **(II-6)**

A. Unable to dress self

B. Unable to feed self

C. Unable to bathe, shower, or shave self

D. Incontinent of bowel or bladder

VII. Approaches to Providing Care for Confused Clients **(II-7)**

A. Care giving environment

1. Treat client with dignity and respect.

2. Know the client as an individual (his/her past, likes, and dislikes).

3. Always introduce yourself, call the client by name, and explain what you are doing when you approach the client. Do this as many times as needed so they will remember who you are.

4. Create a calm, orderly routine.

5. Familiarize clients to surroundings as often as necessary.

6. Provide mechanical aids as needed by client (hearing aids, glasses).

7. Provide sensory stimulation

    a. Conversation - encourage clients to talk about their families and past experiences

    b. Music

    c. Touch

    d. Group activity - have clients participate in a group activity as identified in the plan of care; boredom can cause confusion. Group activity may not be the correct choice for all clients.

    e. Keep a calendar and clock in a visible place and refer to the time and date frequently.

B. Observe physical needs to maintain client's health.

1. Observe and report changes in thinking or memory.

2. Monitor nutritional and fluid intake.

3. Observe and report signs of infection such as an elevated temperature, lethargy, and foul-smelling urine or sputum.

C. Use appropriate measures to maintain function

1. Orient to appropriate holidays or activities related to the nursing home or client's life.

2. Conversation should include current interactions as well as those from past history.

3. Place familiar personal articles in room.

4. Encourage client's participation in activities outside his/her room.

5. Encourage visits, telephone calls, letters from family, friends, visitors, other clients.

6. Assist client to maintain appearance that he/she can be proud of.

7. Respond to feelings, display empathy, interest.

D. Validation Therapy may be one approach

1. Client stress may be reduced if they are allowed to be who and where they think they are.
    a. They can regain their dignity, self-worth, and identity
    b. They often become less agitated and more content.
2. **Only a therapist or your supervisor** can decide if the approach to a client will include validation therapy.
    a. Various factors are considered when deciding if validation therapy is appropriate for a client
    b. Steps involved in the decision making process are:
        1) observation and assessment of each client
        2) determining if the confusion is temporary or permanent
        3) identifying the causes of temporary confusion and contacting the appropriate discipline for treatment
3. Basic rules of interaction with the confused client are consistently applied by all caregivers:
    a. Respond to the clients feelings with respect and caring
    b. Never contradict the client
    c. Touch the client, address by his/her preferred name, and maintain eye contact
    d. Assist the client in exploring his/her past (what, when, how, and where) NEVER ASK WHY

VIII. Problem Behaviors Resulting from Confusion **(II-8)**

A. Catastrophic reaction - the response to a drastic shock or a sudden threatening condition, often occurs with dementia

B. Overreaction - to react excessively or too strongly to a situation

C. Paranoia - suspiciousness inappropriate to reality; individual feels that everyone is picking on him or her or out to get him or her

D. Sundowning - a behavior in which a person becomes more agitated and disoriented during the evening hours

E. Inappropriate sexual behavior

F. Suggestion for coping with these behaviors

  1. Identify exactly the behavior to be examined or altered, separate from attitude.

  2. Try to determine the cause of the behavior.

  3. Plan and discuss ways to handle and react to the behavior with others involved in the client's care.

IX. Summary and Conclusion

A. Terms and definitions

B. Identification of confused clients

C. Causes of confusion

D. Emotional or physical responses

E. Behavioral responses

F. Functional responses

G. Approaches for providing care for confused clients

H. Problem behaviors resulting from confusion

A confused state of mind may be very frightening and upsetting to both the client and the caregiver. Sometimes caring for the confused person is difficult and frustrating because a "cure" is not always possible, and the confused person cannot or will not say "thank you" for your work. Although they are as vulnerable as children, confused clients are not children and should not be treated that way. Your care can make the difference between good days and bad days. Your victories may come in small measure--shared awareness in the moment between you and a confused client--but recognize them as very important achievements and feel proud. The next lesson provides a more in-depth look at one cause of client confusion--Alzheimer's disease.

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

INTERACTION ITEMS:

1. What are the definitions of the terms in the lesson?
2. What are two methods of identifying confused clients?
3. What may cause a client to become confused?
4. What are the emotional or physical responses that may result from confusion?
5. What are four behavioral responses that may result from confusion?
6. What are four functional responses that may result from confusion?
7. How should the health care assistant approach the confused client?
8. How does the health care assistant cope with problem behaviors that result from confusion?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have students break into groups of four or five and role play interactions between a confused client and members of the health care team.
2. View audiovisuals.
3. Have students report their thoughts on the video, *Confused Resident*, from the Missouri Vocational Resource Center.
4. Have the class discuss ways a client may misinterpret his/her environment.

ANSWERS TO EVALUATION ITEMS:

1. d
2. a
3. b
4. g
5. c
6. f
7. e
8. d
9. b
10. d
11. c
12. b
13. c
14. d
15. c
16. a
17. d

LESSON PLAN: 5

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

EVALUATION ITEMS:

Match the following terms to the correct definitions by writing the letter in the blank.

___ 1. Agnosia
___ 2. Sundowning
___ 3. Dementia
___ 4. Apraxia
___ 5. Paranoia
___ 6. Aphasia
___ 7. Catastrophic reaction

a. Behavior in which a person becomes more agitated and disoriented in the evening

b. Severe impairment of cognitive functions

c. Suspiciousness inappropriate to reality

d. Loss of ability to recognize familiar objects

e. Response to a drastic shock or a sudden threatening condition, often occurs with dementia

f. Loss of ability to use or understand language

g. Loss of ability to carry out planned movement at will

Circle the letter that corresponds to the best answer.

8. The definition of confusion is:

   a. Overreacting to circumstances.
   b. Sensory perceptions that seem real.
   c. Behavior problem that is worse in the evening.
   d. A state of being mixed up.

9. A common cause of confusion in the elderly is:

   a. Normal elimination habits.
   b. Depression.
   c. Sufficient oxygen to the brain.
   d. Contact with alert individuals.

10. Emotional responses that may result from confusion include:

    a. Being rude, suspicious, and angry.
    b. Not responding to anything.
    c. Hallucinations.
    d. All of the above.

11. A behavioral response that may result from confusion is:

    a. Having one particular place to keep your purse.
    b. Checking the calendar daily for the date.
    c. Losing and misplacing items.
    d. Being able to do simple tasks of daily living.

12. Functional responses that may result from confusion are:

    a. Being independent and able to dress self.
    b. Unable to bathe, shower, or shave self.
    c. Continent of bowel and bladder.
    d. Feeding and dressing self with minimal assistance.

13. When approaching the confused client, the health care assistant should:

    a. Not bother explaining what the procedure is because they won't understand.
    b. Create an atmosphere of loud noises and a lot of activity.
    c. Treat the client with dignity and respect.
    d. Not touch the client and discourage group activities.

14. The health care assistant should cope with behavioral problems resulting from confusion by:

    a. Identifying the behavior.
    b. Determining the cause of behavior.
    c. Discuss with the other staff ways to handle and react to the behavior.
    d. All of the above.

15. Only the ______________________________ can decide if validation therapy should be used.

    a. Assistant
    b. Unit clerk
    c. Therapist
    d. Client

16. The confused adult client usually likes to be treated as a(n):

    a. Adult.
    b. Infant.
    c. Incompetent person.
    d. Contagious person.

17. When caring for a confused client, the assistant should:

a. Contradict the client.
b. Place all new articles in the client's room.
c. Discourage activity outside of his or her room.
d. Encourage activity outside

UNDERSTANDING MENTAL CONFUSION

About half of the long-term care population consists of clients who are confused, so it is important for health care assistants to understand confusion and how to care for these clients. The client who is confused may exhibit a deficiency in the following ways: memory of recent events, well-learned skills, and long-ago memories; loss of orientation to person, place, and time; language disturbance; visual and motor problems; problem solving and judgement.

> EXAMPLES: The ability to recall something that just happened may be lost but memories of childhood may be intact. Another category of memory has to do with well-learned tasks like driving, writing, dressing, and toileting. It is possible to lose just the ability to sequence the steps of an activity or the entire skill. Giving a verbal cue or demonstrating is helpful. Music is a memory that may remain intact when other skills are lost.

Orientation to person, place, and time may be lost selectively or altogether. A client may not recognize which room is his/hers but could recognize a roommate or nurse.

Language disturbance (aphasia) has two forms. It may be possible to produce speech and talk, but not understand what someone is saying although hearing is not affected. He/she may understand what is being said but is not able to respond with the correct words.

Visual problems (agnosia) is when someone sees but cannot figure out what the object is.

Motor problems (apraxia) is when someone wants to move as in picking up a spoon but just cannot do it.

The client who experiences loss tries to compensate; he or she may become emotionally upset, or become very frightened. There is a hierarchy of functions of the brain that is important to consider, for as the highest level becomes impaired, an individual may depend more on other levels of function. The simplest level is the automatic function like breathing or the heartbeat of which we are hardly aware. The next level is sensory awareness as in seeing, hearing, touching, hunger elimination, and orientation to sex. Higher up the complexity scale are instinctive behaviors which are genetically encoded like caring for others, self-defense, fear, finding shelter, etc. The most sophisticated level is abstraction and thinking, which is the first to be disturbed and is the most noticeable in confused clients. When clear thinking is lost, the client will depend to greater degree on the other levels of function.

It is important for the health care assistant to realize that the client may feel threatened and not understand what is happening in his/her environment. The health care assistant can communicate concern, acceptance, and reassurance. This can be done both verbally and nonverbally (facial expression, eye contact, body language, touch, tone of voice, etc.). The confused person often responds to nonverbal communication when memory and language fail. There are nursing care measures that will help to minimize the effects of confusion. The nursing goal is to maintain the client at the highest possible functional level for the longest amount of time.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

SCOPE OF UNIT:

This unit explores the life stages of human beings. Topics on basic human needs, the aging process, Alzheimer's Disease, and death and dying are included. Correct approaches in providing care for mentally confused clients are a part of this unit as well.

INFORMATION TOPIC: VI-6 OR DEMONSTRATION:

ALZHEIMER'S DISEASE
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Identify the symptoms of Alzheimer's disease (AD).
2. Identify the four stages of Alzheimer's disease.
3. Identify treatments of Alzheimer's disease.
4. Identify key points to remember when caring for Alzheimer's disease clients.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. *Sharing the Burden (Alzheimer's)*, video #1, available from the Missouri Vocational Resource Center, 1 hr. 45 min.
2. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *Glenn's Perspective on Grace*, video (TF #177), 22 min.
    b. *Living with Grace*, video (TF # 21), 26 min.
    c. *Perspectives on Grace: Nursing Implications*, video (TF #115), 22 min.
    d. *Someone I Once Knew*, video (TF #37), 28 min
    e. *Wesley Hall*, video (TF #143), 28 min.
    f. *Sherm*, video (TF #148), 15 min.
    g. *Before the Going Gets Rough (Part 1) & After the Going Gets Rough (Part II)*, video (TF #146)
    h. *Compassion, I Suppose*, video (TF #79), 30 min.
3. Television and VCR
4. Chalk and blackboard

5. Skeletorso

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 6 prior to class and be prepared to discuss the information presented.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991.

Lefrancois, Guy R. *The Lifespan*. 4th ed. Belmont, CA: Wadsworth Publishing Company, 1993.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990.

INTRODUCTION:

As a result of the aging process, significant changes occur in the human body. It is essential that the health care assistant be aware of all the physical changes, mental changes, and social changes. This lesson discusses the symptoms, stages, and treatments of Alzheimer's disease as well as how to care for a client with Alzheimer's disease. Presently, many people are misdiagnosed with Alzheimer's disease. Many long-term care facilities have developed special units to meet the needs of Alzheimer's patients.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

OUTLINE:

I. Symptoms of Alzheimer's Disease (AD)

A. Alzheimer's disease symptoms and progression present slowly; a gradual deterioration may go unnoticed, unlike some dementia which exhibit similar symptoms but have a sudden onset.

B. Symptoms vary in clients; it can be compared to influenza in that some symptoms affect everyone, but how long a symptom lasts and how bad it is varies from individual to individual.

C. Some clients progress quickly through the stages of Alzheimer's disease, while others may live for years without completely deteriorating.

D. Common symptoms **(II-1)**

1. Gradual memory loss - Memory problems and decline in personal self-care may affect all clients. Other impairments may vary.
2. Decline in ability to perform routine tasks
3. Impairment of judgment
4. Disorientation
5. Personality changes
6. Difficulty in learning
7. Loss of language skills

II. Four Stages of Alzheimer's Disease - stages progress from a minor short-term memory loss to a complete loss of bowel and bladder function, memory, and speech; throughout all four stages there is steady mental and physical deterioration. **(II-2)**

A. First stage - behaviors exhibited in the first stage include:

1. Difficulty focusing attention
2. Decreasing interest in environment and present affairs
3. Withdrawal from social interaction

4. Uncertainty in actions

5. Short-term memory loss

6. Typical symptoms associated with this stage of disease:

    a. Still living at home and functioning fairly well

    b. Beginning to have trouble driving

    c. Will have difficulty learning complex tasks

    d. Relocation to an acute care setting can make the client more confused and disoriented.

    e. Client must have instructions repeated several times and even written down on paper.

B. Second stage - behaviors/symptoms which are seen in the second stage of Alzheimer's disease include:

1. Obvious deficits in memory

2. Hesitation in verbal response

3. Disorientation to time

4. Complains of neglect

5. Forgets appointments and significant events

6. Forgets normal routines

7. Behaviors/symptoms associated with this stage begin to present problems for the caregiver.

    a. Client may claim that no one has taken care of him/her that day, even though someone has.

    b. Client often loses money and personal belongings because he/she puts them in a "safe place" but then forgets where it is.

    c. Client may accuse caregivers of stealing misplaced items.

C. Third stage - involves greater mental deterioration; behaviors commonly seen in this stage include:

1. Disorientation to place

2. Wandering

3. Disorientation to person
4. Deterioration in motor ability
5. Immodesty
6. Communication difficulties (repeating words)
7. Compulsive acts of lip licking, chewing, tapping
8. Mirror signs (client does not recognize his/her own reflection)
9. Inability to read or write
10. Symptoms associated with this stage can be extremely difficult for caregivers to work with. Clients cannot function alone for many reasons related to safety issues; they need a great deal of assistance from the caregiver.
    a. Client may wander off and not be able to find the way back.
    b. Clients often refuse to carry out personal hygiene activities because they either think they have already completed them or the prospect of completing these tasks frightens them.
    c. Catastrophic reactions are common. This reaction is a sign that the client is overwhelmed.
    d. Routine activities of dressing, eating, and toileting become difficult, and the client needs more and more help in all activities.
    e. Deterioration continues until the client is totally dependent upon the caregiver.

D. Fourth stage - the terminal stage; life expectancy after reaching this stage is approximately one year.

1. Incontinence
2. Ataxia - loss of coordination
3. Visual hallucinations
4. Extreme psychomotor retardation
5. Inability to communicate or to recognize family members
6. Little or no response to stimuli
7. Susceptibility to infections

8. Marked weight loss

9. Alzheimer's disease clients in the fourth stage require total assistance and continual monitoring.

    a. Client loses the ability to eat and requires alternate feeding methods.

    b. Death usually results from complications due to immobility or respiratory infections.

III. Treatment of Alzheimer's Disease **(II-3)**

A. No cure is available at the present time.

B. Good planning and medical and social management can ease the burden on the client and family.

C. Physical exercise and social activity are important as well as proper nutrition and health maintenance.

D. A calm and well-structured environment may help the afflicted person to maintain as much comfort and dignity as possible.

IV. Points to Remember When Caring for Alzheimer's Disease Clients **(II-4)**

A. Speak in a normal tone of voice. Do not shout or whisper.

B. Ask questions that are short and to the point. Only ask one question at a time. When repeating a question, ask it exactly the same way as you did the first time.

C. Always get the client's attention before commenting or asking him/her a question. As soon as eye contact is made, begin speaking since the Alzheimer's disease client's attention span may only last a few seconds.

D. Use appropriate body gestures to help get your point across. But, be consistent with gestures. It will only add to the client's confusion if you use a gesture to mean one thing one time and something else at a different time.

E. The Alzheimer's disease client may take your actions or words as threatening; do not take it personally.

V. Summary and Conclusion

A. Symptom's of Alzheimer's disease

B. Four stages of Alzheimer's disease

C. Treatments of Alzheimer's disease

D. Points to remember for care

The next lesson is on death and dying.

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

INTERACTION ITEMS:

1. List five common symptoms of Alzheimer's disease.
2. Describe the four stages of Alzheimer's disease.
3. How is Alzheimer's disease treated?
4. List three points to remember when caring for a client with Alzheimer's disease.

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have a class discussion on the stages of Alzheimer's.

ANSWERS TO EVALUATION ITEMS:

1. b
2. a
3. c
4. c
5. d
6. a
7. a
8. b
9. a
10. b

LESSON PLAN: 6

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

EVALUATION ITEMS:

Circle the letter that corresponds to the best answer.

1. Alzheimer's disease symptoms often appear:

   a. Rapidly.
   b. Gradually.
   c. At birth.
   d. In adolescence.

2. Which of the following are common symptoms of Alzheimer's disease?

   a. Gradual memory loss, disorientation, and loss of language skills
   b. Gradual memory loss, disorientation, and loss of motor skills
   c. Gradual memory loss, personality changes, and sudden weight gain
   d. Difficulty in learning, severe lower back pain, and sudden weight gain

3. Which of the following are characteristics of the first stage of Alzheimer's disease?

   a. Incontinence, visual hallucinations, and marked weight loss
   b. Wandering, disorientation to person, and little or no response to stimuli
   c. Short-term memory loss, uncertainty in actions, and difficulty focusing attention
   d. Short-term memory loss, uncertainty in actions, and unableness to recognize family members

4. Inability to read and write is common in the ________________ of Alzheimer's disease.

   a. First stage
   b. Second stage
   c. Third stage
   d. Fourth stage

5. The client usually requires total assistance in the ________________ of Alzheimer's disease.

   a. First stage
   b. Second stage
   c. Third stage
   d. Fourth stage

6. Impairment of judgment and personality changes usually occur in the ________________ of Alzheimer's disease.

   a. First stage
   b. Second stage
   c. Third stage
   d. Fourth stage

7. The cure for Alzheimer's disease is:

   a. Not available at this time.
   b. A newly researched drug.
   c. Excessive physical exercise.
   d. At least 12 hours of sleep per day.

8. Which of the following can help in the treatment of Alzheimer's disease?

   a. Physical exercise, extreme temperatures, and no social interaction
   b. Physical exercise, proper nutrition, and a calm and well-structured environment
   c. Constant mental stimulation, constant physical stimulation, and proper nutrition
   d. Extreme temperatures, good social and medical management, and proper nutrition

9. When speaking with a client with Alzheimer's disease, the assistant should always:

   a. Speak in a normal tone of voice.
   b. Shout; the client has most likely lost all of his or her hearing.
   c. Whisper; speaking in a normal tone may give the client a headache.
   d. Use sign language; the client usually does not understand the spoken word.

10. When asking a question to a client with Alzheimer's disease, questions asked should be:

   a. Personal.
   b. Simple and to the point.
   c. Complex and thought-provoking.
   d. Extremely simple, as if speaking to an infant.

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

SCOPE OF UNIT:

This unit explores the life stages of human beings. Topics on basic human needs, the aging process, Alzheimer's Disease, and death and dying are included. Correct approaches in providing care for mentally confused clients are a part of this unit as well.

INFORMATION TOPIC: VI-7 OR DEMONSTRATION:

DEATH AND DYING
(Lesson Title)

OBJECTIVES - THE STUDENT WILL BE ABLE TO:

1. Match terms presented in this lesson with their correct definitions.
2. Identify factors that affect a person's attitude about death.
3. Match the five stages of dying with the correct description.
4. Identify key points of psychological and spiritual needs of the dying client.
5. Identify specific physical changes associated with the dying process.
6. Identify five signs of approaching death.
7. Identify the health care assistant's feelings toward death.

SUPPLEMENTARY TEACHING/LEARNING ITEMS:

1. *Perspectives on Dying*, Program II, "Psychological Reactions of the Dying Person," filmstrip, Concept Media
2. Audiovisuals available from the Missouri Division of Aging Film Library
    a. *The Lost Phoebe*, video (TF #99), 25 min.
    b. *Dominick and Margaret*, video (TF #116), 56 min.
    c. *The Last Right*, video (TF #75), 28 min.
    d. *The Detour*, video (TF #11), 16 min.
3. Television and VCR

INFORMATIONAL ASSIGNMENT:

Read Lesson Plan 7 prior to class and be prepared to discuss the information presented and return the demonstration on giving postmortem care.

REFERENCES:

Nurse Assistant in a Long-Term Care Facility. University of Missouri-Columbia: Instructional Materials Laboratory, 1993.

Anderson, Mary Anne; Karen Beaver; Ruth Wheeler. *The Long Term Care Nursing Assistant Training Manual*. 1st ed. Baltimore, MD: Health Professional Press, 1991. Chapter 39.

Hegner, Barbara; Ester Caldwell. *Geriatric: A Study of Maturity*. 5th ed. Albany, NY: Delmar Publisher, 1991. Unit 19.

Kübler-Ross, Elisabeth. *On Death and Dying*. New York, NY: McMillan Publishing Co., 1969.

Will, Connie; Judith Eighmy. *Being a Long Term Care Nurse Assistant*. 2nd ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1988. Chapter 3.

Witmer, Dorothy. *Geriatric Nurse Assistant Advanced Training in Selected Competencies*. 1st ed. Englewood Cliffs, NJ: A Brady Book, Prentice Hall, 1990. Chapter 12.

INTRODUCTION:

Caring for a dying client can be one of the greatest challenges of a health care worker. Even though we are well aware that all life must end in death, we tend to avoid thinking about this until we are actually faced with the situation. Today's life span has been increased due to improved health care and medications; however, death is still the last learning experience. It is very important that you, as a nurse assistant, work through your own feelings about death so that you can comfort and assist the dying client and his/her family.

Death can occur at any time from the first few hours of life until the individual is very advanced in age.

This lesson will assist you in identifying the stages that a client and/or the family faced with a terminal illness may go through. We will also discuss the psychological, spiritual and physical needs of the dying client and how to determine when a client is near death.

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

OUTLINE:

I. Terms and Definitions

A. Biological death - cessation of all brain electrical activity **(II-1)**

B. Clinical death - absence of pulse and respirations

C. Hospice - a type of care that provides comfort for terminally ill persons

D. Postmortem - after death

E. Rigor mortis - temporary rigidity of muscles of the body occurring after death

II. Factors Affecting Attitudes About Death **(II-2)**

A. Personal experience

B. Culture

C. Religion

D. Age

III. Five Stages of Dying (as identified by Elisabeth Kübler-Ross[1]) **(II-3)**

It is desirable for a dying client to progress through the five stages of dying. A client may never get beyond a certain stage or he/she may move back and forth between stages. Some clients remain in one stage until death. They may never reach acceptance. The client's family may also experience the same stages of mourning that the client is going through.

A. Denial

1. Individual refuses to believe he/she is dying. The person thinks, "No, not me."

2. The health care assistant needs to be available to the client; allow him/her to deny impending death. Just listen.

---

[1] Kübler-Ross, Elisabeth. On Death and Dying. New York, NY: McMillan Publishing Co., 1969.

B. Anger

1. Individual is envious and resentful of those who have life and health; it is directed at those around him/her; the person thinks, "Why me?"

2. The health care assistant must accept the anger if it is in an acceptable form. Realize it is not directed at you.

C. Bargaining

1. Individual tries to gain more time; usually done with God; the person thinks, "Yes, me, but..."

2. They may want to live until a certain event occurs.

3. The health care assistant should understand the client is trying to buy more time; he/she is beginning to accept the reality of his/her fate.

D. Depression

1. Individual is very sad and mourns over things he/she will never do; the person thinks, "Yes, me."

2. Individual feels sad because he/she is leaving loved ones.

3. The health care assistant should not try to cheer up the client. Realize that the client is mourning.

E. Acceptance

1. Individual experiences peace and calm; is ready to accept death. Reaching this state of acceptance does not mean that the time of death is near. Many elderly clients have reached this point.

2. The health care assistant should assure the client that he/she will be given the best nursing care possible.

3. Resignation - not a true acceptance; giving up

IV. Psychological and Spiritual Needs **(II-4)**

A. The health care assistant needs to use two important aspects of communication when dealing with the dying client.

1. Listening - the client is the one who needs to talk; may be encouraged to discuss his/her feelings, concerns and worries by the presence of one who will listen

2. Touch - conveys caring and concern to the client when words cannot; reaffirms the client's humanness

B. The health care assistant must respect the client's spiritual needs.

1. Assist in obtaining spiritual guidance for the client who may wish to see a priest, rabbi, or minister.

2. Provide privacy during spiritual moments and show courtesy when clergy visits.

3. Assistance in obtaining spiritual support may be needed by the family at the immediate time of death.

V. Physical Changes

A. The process of dying may involve a few minutes/hours or it may take days or weeks. There is a general slowing down of body functions and changes in the level of consciousness.

B. Specific changes **(II-5)**

1. Vision becomes blurred and gradually fails; increased amounts of secretions accumulate in the corners of the eyes.

2. Speech becomes more difficult.

3. Hearing is one of the last senses and functions to be lost.

4. Mucus may accumulate in the mouth as the client is unable to swallow.

5. Urinary and stool incontinence may develop or urinary retention and constipation.

VI. Signs of Death **(II-6)**

A. Eyes have a glossy appearance, stare into space.

B. Movement, muscle tone, and sensation are lost.

C. Peristalsis slows down, noted by abdominal distention, incontinence, impaction, nausea, and vomiting.

D. Circulation fails and body temperature rises. Client's legs and feet feel cool, client may appear pale and perspire heavily. Arms and legs become cyanotic/mottled.

E. Pulse is fast, weak, and irregular; BP begins to fall.

F. Respirations fail - become very slow; Cheyne-Stokes; or rapid and shallow.

G. Mucus collects in the client's throat causing a sound called the "death rattle."

H. Level of consciousness varies--from drowsy, stupor (may still be aroused), to coma (loss of consciousness). Some people do not lose consciousness until the moment of death.

I. The client is pronounced dead when there is absence of a pulse, respirations, and blood pressure. The pupils are fixed and dilated.

VII. The Health Care Assistant's Feelings Toward Death **(II-7)**

A. Learn to express feeling to someone (friends, family, coworker)

B. Realize you are a person with emotions and feelings--it is okay to feel sad when someone you care about dies. It is okay to cry.

C. No one has the answer to how to deal with death--it is an experience of which we are unsure of the outcome.

VIII. Summary and Conclusion

A. Terms and definitions

B. Factors affecting attitudes about death

C. Five stages of dying

D. Psychological and spiritual needs

E. Physical changes

F. Signs of death

G. The health care assistant's feelings toward death and dying

As a health care assistant, you will provide care to many clients throughout the final stage of life. Death is the final stage of the life cycle and a part that none of us can evade. Accepting this fact may help you deal with your own feelings and the feelings of the client and his/her family.

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI: LIFE STAGES

INTERACTION ITEMS:

1. How do you define death, postmortem, and rigor mortis?
2. What four factors affect our attitudes about death?
3. What are the five stages of dying?
4. How can the health care assistant meet the psychological and spiritual needs of the dying client?
5. What physical changes occur during the process of dying?
6. What are five signs of death?
7. What are three ways in which the health care assistant can cope with his/her feelings about death?

CLASSROOM, LABORATORY, OR OTHER ACTIVITIES:

1. Have students write down their feelings about death by answering these questions:
    a. If you only had one more day to live, how would you spend it?
    b. Where would you rather die, in a hospital, nursing home, or at home?
    c. How does the age of a person affect your feelings about death?
2. Discuss how students would expect a dying relative to be treated.
3. Show audiovisuals.
4. Discuss how you would feel if you were the last living individual of your family.

ANSWERS TO EVALUATION ITEMS:

1. c
2. d
3. b
4. a
5. d
6. c
7. d
8. b
9. e
10. a
11. c
12. d
13. c

LESSON PLAN: 7

COURSE TITLE: HEALTH CARE ASSISTANT CORE

UNIT VI : LIFE STAGES

EVALUATION ITEMS:

Match the term in Column I with the correct definition in Column II.

Column I	Column II
____ 1. Rigor mortis	a. Permanent stoppage of all vital functions of the body
____ 2. Hospice	b. After death
____ 3. Postmortem	c. Temporary rigidity of muscles of the body occurring after death
____ 4. Death	d. A type of care that provides comfort for terminally ill persons

5. Factors that affect a person's attitude about death are: (Circle the letter of the best answer.)

   a. Culture
   b. Age
   c. Religion
   d. All of the above

Match the stage of death in Column I with the correct description in Column II.

Column I	Column II
____ 6. Anger	a. The person refuses to believe he/she is dying.
____ 7. Depression	b. The person is ready for death and is peaceful and calm.
____ 8. Acceptance	c. The person is resentful of those who have life and health.
____ 9. Bargaining	d. The person is very sad and moans over things he/she will never do.
____ 10. Denial	e. The individual tries to gain more time.

11. What are physical changes as death approaches? (Circle the letter of the best answer.)

    a. Speech is clear and precise.
    b. Swallowing is continuous.
    c. Urinary retention and constipation may occur.
    d. Hearing is the first sense and function to be lost.

12. Signs of approaching death are: (Circle the letter of the best answer.)

    a. Legs and feet feel cool to the touch and become cyanotic/mottled.
    b. Pulse is fast, weak, and irregular, blood pressure falls.
    c. Mucus collects in the client's throat causing a sound called the death rattle.
    d. All of the above.

13. You have become very fond of Mr. Zimmerman as you cared for him before death. After Mr. Zimmerman dies, you feel very sad. Which one of the following actions would be most appropriate for handling your feelings of sadness?

    a. Do not let your co-workers know how you feel.
    b. Control your feelings and above all do not cry.
    c. Realize it is okay to feel sad and shed some tears.
    d. Ask to have the rest of the day off.